## University of Oregon Bulletin1978-79 General Catalog



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## University of Oregon Bulletin1978-79 General Catalog



Accreditation. Professional schools and colleges have approval from the appropriate accrediting organization : American Assembly of College Schools of Business, American Institute of Planners, American Council on Education for Journalism, American Library Association, American Psychological Association, Association of American Law Schools, Foundation for Interior Design and Research, National Architectural Accrediting
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(3) an understanding of other peoples and cultures as well as our own; and (4) responsible participation in a democratic society.
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Address for all University offices is :
University of Oregon
Eugene, Oregon 97403
Telephone, University information, is : (area code 503) 686-3111

Information in this Bulletin, as in other University bulletins, is subject to change without notice and does not constitute a contract between the University of Oregon and a student or an applicant for admission.
Every effort is made to ensure the accuracy of information at the time of publication, but circumstances constantly change within any institution and new decisions may affect the accuracy of details appearing here. Fee schedules, for example, were being reviewed by the State Board of Higher Education when this Bulletin went to press.

Students are advised to give close study to the Time Schedule of Classes, available at registration. It contains University rules, regulations, academic requirements, class schedules, and other current information. Students are also advised to consult with faculty advisers for information and assistance. Students are expected to follow University rules and procedures and to assume personal responsibility for planning an appropriate course of study to fulfill academic requirements of the University of Oregon. Questions concerning any aspect of the University's programs of instruction are welcomed. Direct inquiries to the Director of Admissions, the Registrar, or to the appropriate dean or department head.

Copies of this publication, University of Oregon Bulletin: 1978-79 General Catalog, are available by mail or on-campus. Cost is $\$ 2.00$. Address mail orders to :

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University Station
Eugene, Oregon 97403
Zip code must be included in the return address. Copies are available on-campus at the University Bookstore and at the Erb Memorial Union.

The University of Oregon Bulletin: 1979-80 General Catalog will be published in July of 1979 and may be purchased in the same manner. The University of Oregon Bulletin: 1978-79 Law School Catalog will be published in September 1978. Address requests to the School of Law. The third publication in the University's Bulletin series, Entering Oregon, will be published in October 1978. It is ayailable from the Director of Admissions. The 1979 Suminer Session Catalog, fourth in the series, will be published in March 1979.
Address requests to Summer Session. These latter three publications are available at no charge.
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Catherine Miller Lauris, Editor.

Cover photograph : Deady Hall, a national historic landmark, houses classrooms and offices for the mathematics department. The photograph is by Warren Morgan, courtesy of the Eugene Register-Guard.
Back cover: : Erb Memorial Union, center of student life on campus. Photograph by Don Hunter.
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George Farquhar
Mark Freemesser
Steve King
Charles Kogod
Oscar Palmquist
Mark O. Stevenson
Michael Zia

1978-79 The One Hundred Second Year

## Fall Term 1978

New Student Week
Sunday to Saturday 17-23 September
Registration
Thursday and Friday 21-22 September
Classes begin
Monday 25 September
Last day to pay fees without penalty
Wednesday 27 September
Last day for fall term registration
Friday 6 October
Last day to change courses
Friday 13 October
Thanksgiving vacation
Thursday to Sunday 23-26 November
Fall term graduation convocation
Friday 8 December
Fall term examinations
Monday to Saturday 11-16 December
Winter Term 1979
Registration
Wednesday and Thursday 4-3 January
Classes begin
Friday 5 January
Last day to pay fees without penalty
Tuesday 9 January
Last day for winter term registration
Friday 19 January
Last day to change courses
Friday 26 January

Winter term graduation convocation
Friday 9 March
Winter term examinations
Monday to Saturday 12-17 March
Spring vacation
Monday to Sunday 19-25 March

Spring Term 1979
Registration
Monday and Tuesday 26-27 March
Classes begin
Wednesday 28 March
Last day to pay fees without penalty
Monday 30 March
Last day for spring term registration
Friday 6 April
Last day to change courses
Friday 13 April
Memorial Day Holiday
Monday 28 May
Spring term examinations
Monday to Saturday 4-9 June
Alumni Weekend
Friday to Sunday 8-10 June
Commencement Day
Sunday 10 June

Summer Session 1979
Registration
Monday 18 June
Classes begitr
Tuesday 19 June

Last day to pay fees without penalty
Friday 22 June
Last day for summer session registration
Friday 29 June
Independence Day Holiday
Wednesday 4 July
Last day to change courses
Friday 6 July
Eight-week session ends
Friday 10 August
Summer Session graduation convocation
Saturday 11 August
Summer Session ends
Friday 31 August

## Fall Term 1979

New Student Week
Sunday to Saturday 16-22 September
Registration
Thursday and Friday 20-21 September
Classes begin
Monday 24 September
Last day to pay fees without penalty
Wednesday 26 September
Last day for fall term registration
Friday 12 October
Thanksgiving vacation
Thursday to Sunday 22-25 November
Fall term graduation convocation
Friday 7 December
Fall term examinations
Monday to Saturday 10-15 December

| September 1978 |  |  |  |  |  |  | February 1979 |  |  |  |  |  |  | July 1979 |  |  |  |  |  |  | December 1979 |  |  |  |  |  |  |
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| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
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# University of Oregon 1978-79 <br> General Catalog 

## Contents

Subject Index ..... v
Admission,
Academic Requirements, and Fees ..... 1
Admission to Arts and Sciences ..... 1
Admission to Professional
Schools ..... 2
Tuition and Fees ..... 9
Financial Aid ..... 10
Services for Students ..... 15
Housing ..... 15
Student Personnel Services. ..... 18
Student Health Center ..... 20
Erb Memorial Union ..... 20
Bookstore ..... 21
Associated Students ..... 21
University Graduate Study ..... 25
Graduate School ..... 25
Research Institutes ..... 32
Marine Biology ..... 32
Molecular Biology ..... 32
Theoretical Science ..... 33
Land Use Research ..... 33
Solar Energy Center ..... 33
Centre at Dubrovnik ..... 33
Social Science Research ..... 34
College of Arts and Sciences ..... 37
Anthropology ..... 38
Biology ..... 42
Chemistry ..... 52
Computer Science ..... 60
Classics ..... 58
East Asian Languages ..... 63
Economics ..... 65
English ..... 69
Geography ..... 76
Geology ..... 80
German and Russian ..... 86
History ..... 92
Linguistics ..... 97
Philosophy ..... 106
Physics ..... 109
Political Science ..... 113
Psychology ..... 119
Religious Studies ..... 125
Romance Languages ..... 127
Sociology ..... 133
Speech ..... 138
Honors College ..... 151
Special Programs and Studies ..... 154
Academic Advising ..... 154
Use of the Library ..... 154
Self-Development ..... 154
Learning Resources ..... 154
Upward Bound ..... 154
Envirommental Studies ..... 154
Museum of Natural History ..... 155
Museum of Anthropology ..... 155
Art History ..... 155
Asian Studies ..... 155
Classical Archaeology ..... 156
Classical Civilization ..... 157
Comparative Literature ..... 157
Ethnic Studies ..... 157
General Humanities ..... 158
General Literature ..... 159
General Science ..... 160
General Social Science ... ..... 161
Latin American Studies ..... 161
Russian and East European Studies Center ..... 162
Women's Studies ..... 163
Prehealth Sciences ..... 164
Dentistry, Preparatory ..... 164
Medicine, Preparatory ..... 164
Medical Technology ..... 165
Nursing, Preparatory ..... 166
Pharmacy, Preparatory ..... 166
Dental Hygiene ..... 166
Preveterinary Medicine ..... 167
WICHE Programs ..... 167
School of Architecture and Allied Arts ..... 169
Center for Environ-mental ResearchInstitute for Com-munity Art Studies
Architecture ..... 170
Landscape Architecture ..... 178
Urban and Regional Planning ..... 181
Art Education ..... 183
Art History ..... 186
Fine and Applied Arts ..... 189
College of Business Administration ..... 195
Undergraduate School ofBusinessAccounting andQuantitative Methods198
Finance ..... 200
Management ..... 202
Marketing, Transportation, Business Environment ..... 203
Graduate School of Management and Business
Business Administration ..... 209
Accounting ..... 210
Quantitative Methods ..... 210
Finance ..... 210
Management ..... 211
Marketing, Transportation,Business Environment212
Institute of Industrial and Labor Relations ..... 213
Wallace School of Community Service and Public Affairs ..... 215
College of Education ..... 222
Educational Policy and Management ..... 224
Adnininistration, Higher
Education, and Educational Policy ..... 226
Division of Developmental Studies ..... 229
Counseling ..... 229
Educational Psychology. ..... 233
Speech Pathology and
Audiology ..... 237
Division of Teacher Education ..... 244
Curriculum and Instruction ..... 244
Special Education ..... 255
College of Health, Physical Education, and Recreation ..... 269
Dance ..... 270
Health Education ..... 274
Gerontology ..... 281
Physical Education ..... 282
Recreation and Park Management ..... 289
School of Journalism ..... 294
School of Law ..... 302
School of Music ..... 315
Reserve Officers Training Corps ..... 328
Academic Services and Special

## Subject Index

Academic advising $\quad 4,20,154$
Academic Calendar iii
Academic Services and Special Studies 330-336
Academic standing 5
Accounting and Quantitative Methods 198,210
Accreditation, University 339
Action Now 22
Admission 1
Admission to the Graduate School
Admission to Professional Schools and Colleges 2
Advanced Degrees 25
Advanced placement 3,5
Advising, academic 4, 20, 154
Advising, financial aid 11
Advising, foreign students 19
Advising, personal 18
Administration 337, 339, 353
Aerospace Studies 329
Affirmative Action ii, 338
Alumni Association 340
Alumni publications 341
Alert 23
Alternate methods for earning academic credit 5
American College Test 1
Anthropology 38
Application deadline (admission) 1
Application (financial aid) 11
Aquatic program 285
Architecture and Allied Arts 169-177
Architecture 170-175
Art Education 183-185
Art History 155, 186-188
Arts and Sciences $\quad 6,25,37-168$
Arts and Letters group requirement 7
Asian-American Student Union 23
Asian Studies 155
Assistance for Handicapped 18, 338
Associated Oregon Student Lobby 22
Associated Students of the University of Oregon
ASUO 21
ASUO News Bureau 23
Athletics 340
Athletic Trainer program 285
Automobile fees 10
Baccalaureate degree, requirements for
Biochemistry major 53
Biology 42-51
Biology, Institute of Marine 32, 51
Biology, Institute of Molecular
Biosocial Research Center 45
Black Student Union 23
Bookstore 21
Board of Directors (EMU) 21
Broadcast Services and Televised Instruction 335
Broadcasting, Journalism 300
Brown Foundation 223
Buildings, campus 342
Bureau of Business Research 195
Bureau of Governmental Research and Service 221
Business Administration, College of 2, 7, 195-213
Business Affairs 1, 337, 340
Business and Construction 175
Business Environment 205
Campus buildings 342
Campus map 344
Campus security 341
Canoe shack 21
Career Information System (CIS) 220
Career Planning and Placement Service
Careers, anthropology 38
Careers, architecture
Careers, art education 183

Careers, biology
43
Careers, chemistry 54
Careers, Community service and public affairs 215
Careers, economics 65
Careers, education 222
Careers, geology 80
Careers, German and Russian 86
Careers, health education 274
Careers, health, physical education, and recreation 269
Careers, history 92
Careers, landscape architecture $\quad 178$
Careers, Latin American Studies 162
Careers, linguistics 97
Careers, political science 113
Careers, psychology 119
Careers, public service 219
Careers, religious studies 125
Careers, Romance Languages 127
Careers, sociology 133
Careers, speech 139
Center at Oregon for Research in the Behavioral Education of the Handicapped (CORBEH) 223
Center for Capital Market Research 195
Center for Educational Policy and Management 223
Center for Environmental Research 169
Center on Human Development 222
Center for International Music Education, Reading, England 317
Center for Volcanology 82, 85, 343
Center of Leisure Studies 289
Center for Self-Development 154
Ceramics 191
Certificate in Women's Studies 163
Certificate of Specialty in Ocean Resources (law) 305
Certificate program for Russian and East European Area Studies 162
Certification, Teacher 245
Civil Practice Clinical Program (law) 304
Chemistry $\quad 52-57$
Child Care Centers 21
Chinese 63
Chinese Student Association
23
Classics $\quad 58-59$
Classical archaeology 156
Classical civilization 58, 157
Clinical experience program (law) 304
Club Sports and Recreation Center 21
College entrance examinations 1,2
College Level Examination Program (CLEP) 3,5
College of Arts and Sciences 25, 37-168
College of Business Administration 25, 195-213
College of Education 25, 222-268
College of Health, Physical Education, and Recreation 25, 269-293
College transfer students; please sce individual departments of instruction
Coaching program 285
Community college transfer students 8 please sec also individual departments of instruction
Community colleges 2, 8
Community Education $\quad 5,10,249$
Community Service and Public Affairs 2,7,217
Community Service and Public Affairs, Wallace School of 215-221
Comparative Literature 157
Computer science 60-62
$\begin{array}{ll}\text { Computing Center } & 334 \\ \text { Continuing Eduction } & 2,4,7,335\end{array}$
Cooperative housing
Corrections Clinic (law) $\quad 305$
Costs of University attendance 10
Counseling (academic studies in) 229-233
Counseling Center 19
Course challenge 5
Course numbering system
Course numbering system 6

Craft Center 21
Creative writing 74
Credit by examination 3
Criminal Defense Clinic 304
Crippled Children's Division 239
Crisis Center 22
CSPA (Community Service and
Public Affairs) 217
CSPA Independent Studies 220
Cultural Forum 21
Curriculum and Instruction 244-255
Curriculum and Supervision 249
Dance, Department of 2,270-273
Deferred tuition 10
Definitions
Degrees offered by the University 6,25
Degree Requirements for Master of Arts, Master of Science 28
Dental Hygiene 166, 277
Dentistry, preparatory 164
Developmental Delay Clinic
239
Development Fund 341
Division of Continuing Education 2, 4, 7, 335
Division of Developmental Studies 229
Division of Teacher Education 244-268
Drug Information Center 22,274
Doctor of Education 31 pleasc scc also College of Education
Doctor of Music Arts 31, 321
Doctor of Philosophy 30 please sec also the individual departments and schools
Doctoral Degree Procedures 35
Dormitories 15
Dormitory fees 16
Dubrovnik 33
Early Admission 2 /
Early childhood education 248
Early Orientation and Registration Program (EORP) 18
East Asian languages 63-64
E C Brown Foundation 223
Economics 65-68
Education 2,7
Educational Administration, Higher Education, and Educational Policy 226
Educational psychology 233-236
Educational research and development 224
Elementary teacher education 246, 249
Emancipated student 3
Employment, Advising 14
English 69-75
English Composition 1, 3,74
English department honors program 70
Enrollment 1, 3,4
Ethnic Studies 157
Environmental Law Clinical Program 305
Environmental Studies Center 154
Environmental studies, geography 76
Equal opportunity. ii, 338
Erb Memorial Union 20
ERIC Clearinghouse on Educational Management 224
ESCAPE 22
Eugene, Oregon 339
Exchange students 13
Experimental Center for the Advancement of Invention and Innovation 195
Expository writing 74
Fees $\quad 9,10$
Fees, automobile 10
Fees, domitory 16
Fellowships 31
Field Training and Service Bureau 224
Film Studies 139-142
Finance, Department of 200-201, 210
Financial aid $10,11,12$
Fine and Applied Arts 189-193
Food-Op Inc. 23
Foreign students $\quad 1,19,23$

Forensics 122
Forest Industries Management 195, 207
Gay People's Alliance
23
General deposit 9
General Humanities
General Literature
General regulations
General Social Science 26
General Science 160
Geography 76-79
Geology 80-85
Geology-paleontology 80
German 87
German and Russian, Department of 86-91
German Study Center, Stuttgart 86
Gerontology 281
Gerontology Association 23
Graded hours 7
Grade point average $\quad 1,6$
Grade requirements (graduate) 27
Grading system (undergraduates) 6
Graduate Council 25
Graduate courses
Graduate Credit by Examination 28
Graduate School of Management and Business 206-213
Graduate studies; please see individual departments of instruction
Graduate tuition. 9
Graduation requirements 7
Greek
Group requirements 7,8
Handicapped Learner 267, 256
Handicapped students 18
Health Center, Student 20
Health Education 7, 274-280
Health insurance $\quad 10,20$
Health, personal, course requirement 7
Health, Physical Education and Recreation College of 269-293
Herbarium 46
High school preparation ; please see the individual departments of instruction
History, Art 186
History, Department of 92-96
History, University of Oregon 337
Holiday schedule iii
Honors 4, 151-153 please see also the individual departments
Honors College 4, 6, 151-153 major requirements 152
Honor Societies 4
Housing Cooperatives 17
Fraternities and Sororities 17 Off campus 17 Student family 16
Housing Office (ASUO) 22
Human Development, Center on 222
Humanities, General 158
Immunization requirements 20
Income, University 339
Independent study 153
Institute for Community Art Studies 169
Institute for Land Use Research 33
Institute for Social Science Research 34
Institute of Industrial

$$
\text { and Labor Relations } 195
$$

Institute of Marine Biology 32, 51
Institute of Molecular Biology 32
Institute of Recreation Research and Service 289
Institute of Theoretical Science 33
Instruction, courses of 38-329
Instructional Technology 249
Intercollegiate Athletics 340
Interdisciplinary Studies $\quad 6,25,29,37$
Interior Architecture 175-177
International Education Center (ASUO) 22

International Student Orientation 19
International Student Services 19
International Studies, Master of Arts,
interdisciplinary (CSPA) 219
Inter-University Centre of Postgraduate
Studies, Dubrovnik, Yugoslavia 33
Intramural sports 283
Italian 128
Japanese 63
Jewelry and Metalsmithing 191
$\begin{array}{ll}\text { Journalism, School of } & 2,7,294-301 \\ \text { Journalistic Writing } & 3\end{array}$
KOAC-TV 335
KOAP-TV 335
KWAX-FM 335
Labor Education and Research Center
Labor Relations,
Institute of Industrial and 213
Land Use Research, Institute for 33
Landscape Architecture 178-180
Late filing 1
Languages

| Chinese | 63 |
| :--- | ---: |
| Czech | 91 |
| English | 69 |
| French | 129 |
| German | 87 |
| Greek | 58 |
| Italian | 130 |
| Japanese | 64 |


| Latin 58 |
| :--- |
| Norwegian |

Polish 91
$\begin{array}{ll}\text { Portuguese } & 131 \\ \text { Provençal } & 131\end{array}$
$\begin{array}{ll}\text { Russian } & \\ \text { Scandinavian } & 89\end{array}$
Serbo-Croatian 91
$\begin{array}{ll}\text { Slavic } & \\ \text { Spanish } & \\ & 131\end{array}$
$\begin{array}{ll}\text { Swedish } & 89 \\ \text { Ukrainian } & 91\end{array}$
Latin 58
Latin American Studies 161
Law, School of 7, 302-314
Law School programs and activities 305
Law School tuition 9, 308
Law scholarships 310
Law school admission test 307
Law students academic calendar 310
Learning Resources Center 154
Legal Services (ASUO) 22
Legislative Issues Workshop (law) 305
Librarianship 7,332
Library, University 330-332
Library, Use of 154, 332
Lifelong Learning Services 18
Linguistics 97, 98
Literature, English 72,75
Literature, General 159
Loan Fund 13
Management and Business, Graduate
School of 206-213
Management, Department of 202-203, 211
Marketing, Transportation, and Business
Environment, Department of
203-205, 212
Master's Degrees, requirements for 28
Mathematics, Department of 99-107
M.B.A. Program 206

MECha 23
Medical Technology 165, 277
Medicine, preparatory 164
Mental Retardation 265-267
Metalsmithing 191
Military Science, Department of 328
Minimum criteria, admission 1
Model programs; please see individual departments of instruction
Modern Repertory Company
22
Molecular Biology, Institute of 32

Museum of Art 333
Museum of Natural History 155
Music (ASUO) 22
Music Performance Studies 326-327
Music, School of 3, 7, 315-327
Music fees 317
Native American Student Union
23
National Public Radio 335
National Register of Historic Places 343
National Student Exchange 19
National Student Lobby 22
Natural History, Museum of 155
NCAA 340
New Student Week 19
News Bureau 341
News Bureau (ASUO) 23
News-Editorial 299
Nonresident fees 3
Nonresident students $\quad 1,2$
Northwest College Women's Sports
Association 340
Norwegian 89
Nursing, preparatory 166
Ocean Resources, Certificate of Specialty in 305
Occupational therapy, preparatory 167
Office of Admissions 1
Office of Financial Aid 11
Office of Student Services 18
Office of the President 337,339
Office of the Registrar 1
Office of the Vice-President for Academic Affairs and Provost 337, 339
Office of the Vice-President for Administration and Finance 337,339
Office of the Vice-President for Public Affairs 337, 339
Old Oregon 340,341
Olympic Track and Field Trials 340
Optometry, preparatory 167
Oregana, The 22
Oregon Center for Gerontology 281
Oregon Business Review 195
Oregon Daily Emerald 22
Oregon Institute for Land Use Research 33
Oregon Institute of Marine Biology 32,51
Oregon Law Revieru 305
Oregon State Board of Higher Education $3,9,16,353$
Oregon State Museum of Anthropology 155
Oregon State System of Higher Education ii, 2, 353
Oregon Student Association for the Advancement of Health Education 274
Oregon Today 340, 341
Oregon Week 341
Orientation Office 18
OSPIRG 22
Osteopathic medical schools 165
Outdoor Program 21
Outstanding students 4
Overseas study, Romance Languages 129
Pacific-10 Conference 340
Pacific Ocean 339
Painting 192
Paleontology 80
Park Management 289
Parents' Statement of Financial Support 3
Parking fees 10
Performance Studies (music) 326
Pharmacy, preparatory 166
Philosophy, Department of 106-109
Philosophy, Doctor of 30
Physical education course requirements
Physical Education, Department of 282-288
Physics, Department of 109-113
Physical Plant 341, 342
Physical therapy, preparatory
Physically handicapped students 18,338

| Pine Mountain Observatory 341 | Science group requirement |
| :---: | :---: |
| Placement examinations 3 | Science, Institute of Theoretical 33 |
| Placement Service 19 | Sculpture 192-193 |
| Podiatry, preparatory 168 | SEARCH Office of Experimental and |
| Poitiers, University of 130 | Innovative Education 22 |
| Police (campus security) 341 | Secondary Teacher Education 249 |
| Policy and Management, Center for 224 | Self-Development, Center for 154 |
| Polish 91 | Serbo-Croatian 91 |
| Political Science, Department of 113-118 | Service courses in physical education 283 |
| Portuguese 131 | Services for Students 15-23 |
| Postbaccalaureate study | Severely Handicapped Learner 257, 267 |
| Postdoctoral Fellowships 32 | Slavic 91 |
| Post Office 21 | Social Science group requirement ${ }^{8}$ |
| Predentistry 164 | Sociology, Department of 133-137 |
| Prefreshman Program 334 | Solar Energy Center 33 |
| Prehealth Sciences 164-168 | Sororities 17 |
| Prehealth Sciences Center 23 | Spanish 128, 131 |
| Premedicine 164 | Special Education 255-268 |
| Prenursing 166 | Special programs, arts and sciences |
| Prepharmacy 166 | 154-163 |
| Prephysical therapy program 285 | Speech, Department of 138-150 |
| Presidents, University 338 | Speech and Hearing Center 242 |
| Preveter inary medicine 167 | Speech Pathology and Audiology 237-242 |
| Print Shop (EMU) 21 | Sports, Intramural 283 |
| Printing Department, University 377,340 | State Board of Higher Education 9, 16, 23, |
| Printmaking 192 |  |
| Professional schools and colleges, admission to 2 | State Certification in Speech Therapy 237 Standard Teaching Certificate, Secondary |
| Program 3-D 23 | 248 ( |
| Project Extend-Ed 289 | Student Administrative Services |
| Prosecution Clinic (law) 304 | Student Bar Association 23 |
| Provencal 131 | Student Conduct Program 19 |
| Psychology, Department of 119-124 | Student employment 14 |
| Psychology, Educational 233-236 | Student-Family Housing 16 |
| Public Affairs and International Studies | Student Health Center 4, 9, 20 |
| Graduate Programs 218-220 | Student Housing 15-18 |
| Public Health 168 | Student Personnel Services 15, 18-20 |
| Publications Office 341 | Student Projects, Inc 22 |
|  | Student Union (EMU) , 20, 21 |
| Quantitative Methods 199, 210 | Student University Affairs Board 22 |
| Reading and Language Arts 249 | Study abroad <br> 13, 19 <br> Style Mamual for Theses and Dissertations |
| Recreation and Park Management, | 31 |
| Department of 289-293 | Summer Session 2,333 |
| Recreation 21, 22, 23, 283, 316, 33, 335, 340 | Summer Session Catalog ii, 4, 334 |
| Recreational Folk Dancing 22 | Survival Center 22 |
| Refunds 10 | Swedish 89 |
| Regional Resource Center 223 |  |
| Registration Procedure 4 | Teacher Certification 245 |
| Religious Studies, Department of 125-126 | Teacher Education, Division of 244-268 |
| Removal of Incompletes 28 | Telecommunications 145-148 |
| Repertory Dance Companies 270 | The University Today 338 |
| Repertory Dancers 22 | Theater 148-150 |
| Research and Training Center on | Theatre 4:30 148 |
| Mental Retardation 223 | Theoretical Science, Institute of 33 |
| Research Institutes 32-34 | Thesis 31, passim |
| Reserve Officers Training Corps 328-329 | Time Schedule of Classes $4,5,7,8,9,10$, |
| Resident fee 3,9 | 19, 27, 334 |
| Resident Teacher Program 252 | Title IX ii, 12, 338 |
| Residence work at University 7 | Transcripts 1, 9,26 |
| Rhetoric and Communication 142-145 | Transfer students 2, 8; please see also |
| Robert D. Clark Honors College 151-153 | the individual departments of instruction |
| Romance Languages, Department of | Transportation 205, 212 |
| 127-132 | Tuition and fees 9 |
| Russian 87, 90 | Tuition, deferred 10 |
| Russian and East European Studies Center | Tuition, fees, and deposits (graduate) 28 |
| 162 | Tuition, refunds 10 |
| Scandinavian 89 | Ukrainian 91 |
| Schedule of Classes 4, 5, 7, 8, 9, 10, 19, 27, | Undergraduate Admissions |
| 334 | Undergraduate School of Business 196-205 |
| Scholarships 12;please see also the | Undër graduate transfers 2 |
| individual departments | Undergraduate tuition, nonresident 9 |
| Scholastic Aptitude Test 1,2,3, | Undegraduate grading system 6 |
| School of Architecture and Allied Arts | Unemancipated student 3 |
| 169-177 | University Administrative Services |
| School of Community Service and | U337-341 |
| Public Affairs, Wallace 215-221 | University Computing Center 334 |
| School of Journalism 294-301 | University Counseling Center 19 |
| School of Law . 302-314 | University goals and objectives ii, 338 |
| School of Librarianship 332 | University Graduate Study 25-35 |
| School of Management and Business, | University history 337 |
| Graduate 206-213 | University Library 154, 330-332 |
| School of Music 315-327 | University Library Instruction 154,332 |
| Science, General 160 | University of Oregon Bookstore 21 |

University of Oregon Center for Gerontology 281
University of Oregon Development Fund 341
University of Oregon Health Sciences Center 164, 353
University of Oregon Loan Fund 13
University Printing Department 337, 340
University Relations 341
University of Oregon satisfactory work (academic requirements)
University Speech and Hearing Center 239
University Theater 22
University Women in Transition 22
University Year for Action 242
Urban and Regional Planning 18,182
Urban studies, geography 77
Vice-presidents 337, 339, 353
Villard Hall 343
Visual Design 191
Volcanology, Center for 85,343
Wallace School of Community Service and Public Affairs 215-221
Weaving 193
Western Interstate Commission for Higher Education 167
WICHE, library program 332
WICHE Programs in Health Sciences 167
Women's Intercollegiate Athletics 340
Women's Resource and Referral Service 22
Women's Sports Council 340
Women's Studies 163
Work-study 14
Writing 2, 74
Written English 7


# Admission, Academic Requirements, and Fees 

## Student Administrative Seraices

Gerard F. Moseley, Ph.D., Associate Provost for Student Affairs. B.S., Randolph-Macon College, 1962 ; M.S., 1964, Ph.D., 1969, Yale.
James Buch, M.A., Director of
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Robert H. Campillo, M.A., Associate Director, Assistant Dean, Admissions. B.A., 1971, M.A., 1973, Sonoma State.

Vernon Barkhurst, M.A.. Director for School and College Relations. B.A., 1949, M.A., 1951, Oregon.
William Ballester, M.A., Coordinator
for Student Athletes. B.S., Southern
Illinois, 1961 ; M.A., Roosevelt
University, 1966.
Wanda M. Johnson, M.A., Acting Registrar. B.S., 1971, M.A., 1977, Oregon.
Christopher Munoz, B.A., Assistant Registrar. B.A., California State. Fullerton, 1970.
Jack E. Schulz, A.S., Director, Data Reduction Services. Associate Science in Data Reduction, Chemeketa, 1964.
Edmund Vignoul, M.Ed., Director of Student Financial Aid. B.A., Denver, 1963 ; M.Ed. Texas, 1968.
Emmett R. Williams, Ph.D., Associate Director, Financial Aid. B.S., 1953, M.S., 1970, Ph.D., 1975, Oregon.

Lance Popoff, B.S., Assistant Director, Financial Aid. B.S., Pacific University, 1970.

Carol Richard, M.L.S., Assistant Director, Financial Aid. B.S., Southern Illinois, 1959, M.L.S., 1975, Oregon.

## Business Affairs

W. N. McLaughlin, B.S., C.P.A., Director, Business Affairs. B.S., Oregon, 1949 ; C.P.A., State of Oregon, 1954.
Donald L. Thomas, B.S., C.P.A., Assistant Business Manager. B.S., Oregon, 1960 ; C.P.A., State of Oregon, 1963.

Harry Cronan, B.A., Auditor. B.A., Bentley College, Boston, 1970.
Rod Bowman, B.A., Data Systems Coordinator. B.A., Kansas State, Emporia, 1965.
Carole Parkinson, B.S., Supervisor,

Distribution Center. B.S., Oregon, 1972.

Donald C. Howard, B.A., P.A., Financial Research Administrator. B.A., Willamette, 1959 : P.A., State of Oregon, 1964.
W'alter Parsons, Supervisor, Printing Department.
Dorothy Grover, Supervisor, Telephone Exchange.
Kerry Kelly, B.S.. Claims Auditor. B.S., Evergreen State College, 1976.

## Admission

Undergraduate Admissions. To be admitted to the University, undergraduate students must send to the Office of Admissions: (1) an application on an official University form, available from the Office of Admissions or in the office of the principal in high schools of Oregon ; (2) a $\$ 10.00$ application fee (this fee is not refundable) ; (3) official transcripts of all high school or college records or both (college transfers need not file a separate high school transcript).

Freshmen applicants (including college transfers who either will transfer with less than 15 quarter credit hours of advanced standing or who have not completed a course in English Composition) must also file with the Office of Admissions the results of either the Scholastic Aptitude Test, or the American College Test. The test results are used for advising and for courseplacement recommendations. Applicants who will submit transcripts from schools which do not use a traditional grading system ( $A=4.00$, etc.) should submit the results of the American College Test.

Applications and supporting materials should be filed well before the applicant intends to enter the University. Late filing may delay or prevent registration. Undergraduate students (except foreign students) seeking admission should submit their applications to the Office of Admissions at least thirty days prior to the start of the term to which admission is sought to insure enrollment materials will be prepared in time for registration.

An undergraduate applicant who is
not a citizen of the United States, and who does not possess an immigrant visa, is encouraged to file an application and the available supporting credentials by May 1 if seeking admission to the summer session or the fall term. Application deadline for winter term is October 15 ; for spring term, Jannary 15.

Students who knowingly subnnit altered transcripts or falsified applications jeopardize their admission status and may have their registration cancelled. All records submitted, filed, and accumulated in the Office of Admissions and the Office of the Registrar become the property of the University.

To be considered for admission to the University's undergraduate colleges and schools, a student must satisfy the minimım criteria described below. However, satisfaction of these minimum admission standards does not guarantee acceptance.

## Admission to the College of Arts and Sciences

To be admitted to freshman standing in the College of Arts and Sciences, a student must be a graduate of a standard or accredited high school and, in addition, must meet certain qualitative educational standards. The qualitative requirements for residents of Oregon differ from those of nonresident students.

Resident Freshmen. To be eligible for admission with freshman standing, a student who is a resident of Oregon must have a 2.50 grade-point average in all high-school subjects taken for graduation. If a grade-point a verage of 2.50 has not been achieved, the student may still be admitted to any term provided the grade-point average combined with the scores achieved on either the Scholastic Aptitude Test or American College Test, yields a predicted first term college grade-point average of at least 2.00 . The predicted grade-point average is the product of a formula which weights the three elements involved, i.e., grade-point average, verbal aptitude, and mathematics aptitude according to the contribution each seems to make in the forecasting of academic success at the University.

Another admission option is to
achieve a grade-point average of 2.00 on either a structured 12 credit-hour course load in a University of Oregon summer session or a 15 credit-hour ( 10 semester credits equal 15 term credits) load of the students' choice in any accredited college which then qualifies the student for admission as a transfer student. The structured 12 -credit load in the University of Oregon summer session must include Writing 121 and any 9 -credit combination of arts and letters, social science, and science courses which will satisfy the group requirements for graduation. All credits taken under either option must be graded. Nonresident Students. To be eligible for admission with freshman standing, a student who is not a resident of Oregon must : (1) have a 2.75 gradepoint average in all high-school subjects taken for graduation ; or (2) have a 2.25 high school grade-point average combined with satisfactory scores on either the Scholastic Aptitude Test or the American College Test which yields a predicted first-term college gradepoint average of at least 2.10 ; or (3) achieve a grade-point average of 2.00 on either the 12 or 15 credit hour summer session options defined above for Oregon residents.
Early Admission. A high-school student who meets the above criteria for either resident or nonresident applicants by the end of the first six semesters of high school work will be granted admission with subsequent enrollment contingent only upon completion of high-school graduation requirements, and maintenance of the minimum qualifying standards.

## Admission of <br> Undergraduate Transfers

Transfer students are persons admitted to the University of Oregon after having been registered in other universities, colleges, and community colleges, or in a department or center of extension work, including the Division of Continuing Education of the Oregon State System of Higher Education. Transfer students must show that they were in good standing when leaving the college or university previously attended. To be eligible for admission as a transfer student, one must present a grade-point average of 2.00 covering all previous transferable college work attempted. Transfer students who have completed less than 15 term credit hours ( 10 semester units) of graded transferable college work must meet the requirements for freshman admission.

The amount of transferred credit granted depends upon the nature of the
applicant's previous work evaluated according to the academic requirements of the University. Records from institutions fully accredited by appropriate regional accrediting associations are evaluated before admission is granted. A maximum of 108 credit hours earned at an accredited community college or junior college may be counted toward the baccalaureate degree. Usually, no advanced standing is granted at entrance for work done in nonaccredited schools. However, such credit may be transferred or validated for transfer by examination or by petition. Only credit for courses substantially equivalent to University courses will be allowed.

## Admission to Professional Schools and Colleges

The requirements for admission to the University's professional schools and colleges establish minimum standards for a particular program. Meeting these standards does not guarantee acceptance to it. Applicants for admission to the professional schools and colleges must meet the same ninimum admission standards as were previously cited for the College of Arts and Sciences. Stu1dents are usually admitted to the professional schools with a premajor status. Several schools and colleges employ additional criteria and selection techniques to insure that enrollment does not exceed their capability to deal effectively with it. Please consult the departmental sections of this catalog for further details.
Architecture and Allied Arts. Prospective Art Education, Art History and Fine and Applied Arts majors are admitted with major status if they meet the University admission standards. Landscape Architecture applicants who have earned college credits, and Architecture and Interior Architecture applicants are requested to submit supplementary information as specified by the department. Instructions are forwarded to applicants when the application for admission to the University is received by the Admissions Office. No special submissions are required for Landscape Architecture applicants who will be freshmen. The deadline for applying for Architecture, Interior Architecture, and Landscape Architecture is February 15. Students are admitted for the Fall term only.
Business Administration. Prospective majors are admitted as prebusiness majors and must satisfy specified criteria before being accepted as majors in the College of Business Administration. (See details in the College of Business section of this catalog.)

Community Service and Public Affairs. Applicants who will have completed less than 90 credit hours at the time of their matriculation are admitted to the School with premajor status. To be admitted as a major in the School requires, in addition to the general standards, that the applicant be a college junior ( 90 credit hours of advanced standing) and have completed most of the general University requirements.

In addition to the University application, prospective majors are required to submit a separate application for admission to the School of Community Service and Public Affairs which is obtained from the School's undergraduate advising office. The deadlines for applying are winter term, November 1 ; spring term, February 1 ; summer and fall, April 15 ; extended fall deadline July 30 .
Education. Prospective majors are admitted with premajor status and must complete specified courses in Education to be classified as majors. Students transferring to the University will have their prior record reviewed by the college for placement in the curriculum (see Education section of this catalog for details).
Health, Physical Education, and Recreation. Prospective Physical Education, Health Education and Dance majors are initially admitted with premajor status. Students designating Recreation and Park Management as their major will be admitted to the lower-division program with major status. In this status, they are advised by the head undergraduate adviser and they complete departmental prerequisites before becoming eligible for admission to the upper-division program. To be accepted as a major in Health Education or Physical Education, the applicant must have completed a number of general University of Oregon and departmental requirements (see Health or Physical Education section of this catalog for details).

The Department of Dance accepts students who are not Dance majors in many classes offered by the Department. To enroll in technique classes, however, requires an audition. Students accepted initially as premajors must satisfactorily complete a number of foundation courses specified by the Department to become classified as Dance majors.
Journalism. Acceptance as a journalism major requires that the student be a college junior ( 90 credit hours), have substantially satisfied the lower-division requirements of the University, and have achieved a grade-point average of
2.50 , or higher. In addition, the student must have completed, with credit, Journalistic Writing (J 250) or equivalent, or have passed the school's waiver examination for this course. Since many students transferring from other institutions will not have had the opportunity to fulfill this requirement, they begin their professional studies as prejournalism students.
Music. An applicant seeking admission to the School of Music will be asked to submit supplementary information when the application is received in the Office of Admissions. Arrangements will also have to be made for an audition which may be done in person or be satisfied by the submission of a tape recording of the applicant's personal vocal or instrumental performance, or of a performance of the applicant's own compositions. (For details of these procedures refer to the School of Music portion of this catalog.)
School of Lazw. Admission to the School of Law at the University of Oregon is predicated upon the receipt of an undergraduate degree. Information about admission to the School of Law may be obtained by writing directly to the dean of the School.

For further details on admission, direct inquiries to the Director of Admissions, University of Oregon, Eugene, Oregon 97403.

## Nonresident Fee

Under the regulations of the Oregon State Board of Higher Education, an unemancipated student whose parent or guardian is a bona fide resident of Oregon qualifies for enrollment under the resident fee. Only persons who are citizens or permanent residents of the United States may qualify for resident classification. An emancipated student whose domicile is independent of parent or guardian qualifies for enrollment under the resident fee if convincing evidence is presented that the student established a domicile in Oregon six months prior to his or her first registration in any institution of higher learning in the State of Oregon (enrollment in any term including a summer session constitutes registration).
An emancipated student is one who has a domicile independent of parents or legal guardian and receives no financial support from them. Students claiming empancipation on the basis of independence of domicile and financial support are required to furnish a notarized Parents' Statement of Financial Support (this form is available from the Admissions Office). This statement must verify that: (1) The
parent is not supporting the student financially and has not since the date nonsupport began, as attested in the sworn statement. (2) The parent did not claim the student as a Federal income tax deduction in the most recent tax returns and will not do so in the future. The time requirement (for either the six-montlis rule or twelvemonths rule) for residency will begin with the date appearing on the notarized statement of the parent or legal guardian.
An emancipated student who seeks to qualify for residency by virtue of residing in Oregon six months prior to the time of registration at the University must not only be present in Oregon in person, but must demonstrate that a bona fide permanent domicile in Oregon has been established.

An emancipated student who fails to establish an Oregon domicile at least six months prior to initial registration at an Oregon institution of higher education, but who pays nonresident fees. and lives continuously in Oregon during twelve consecutive months, may be considered a resident of Oregon for fee purposes if it can be demonstrated that a bona fide permanent domicile has been established.

A student who has been classified as a nonresident may be considered for reclassification as a resident under the following conditions:
(1) For an unemancipated student, if parent or guardian has moved to Oregon and has established a bona fide domicile in the state.
(2) For an emancipated student whose domicile is independent of that of parent or guardian, convincing evidence must be presented that domicile has been established in Oregon, that the student has lived in the state for an entire year immediately prior to the term for which classification is sought, and that there is no intention of moving out of the state immediately after school work is completed.
A student whose official record shows a domicile outside Oregon is a nonresident and the burden is upon the student to prove Oregon residence. If the student's academic record shows attendance at a school outside Oregon, further proof of Oregon domicile may be required.

Applicants with questions concerning the rules governing the administration of these policies should consult the Office of Admissions.

## Placement Examinations

Freshman applicants and transfers with less than 15 quarter hours of credit
must submit the results of either the Scholastic Aptitude Test or the American College Test. Transfer applicants who have not completed a course in English Composition must also submit the test scores. Results of these tests determine the student's placement in Writing and Mathematics. In addition, an individual who has studied one foreign language for two or more years in high school should take the College Board Achievement Test in that language for potential placement usage, if the language is to be studied in college, or for possible waiver of the language requirement for a degree when this is appropriate. Special campus administration of placement tests may be arranged for those who seek admission too late to be served by one of the nationally scheduled testing dates. Advanced Placement Program Students who receive satisfactory grades in Advanced Placement examinations administered by the College Board may, on admission to the University, be granted credit toward a baccalaureate degree in comparable University courses.
The fields included in the Advanced Placement Program are : English composition and literature, Art History, American history, European history, biology, chemistry, physics, mathematics, French, German, Spanish, and Latin. Information concerning advanced placement may be obtained from the Office of Admissions, Oregon Hall.

## Credit by Examination

Students may acquire undergraduate credit by examination for any University of Oregon course numbered 100499 , with the exception of courses numbered 199, and 401-420 inclusive, unless the department or school responsible for the course has specifically withdrawn the course for such purpose. Students may also receive credit through examinations in the College Level Examination Program (CLEP). The CLEP fields approved at the University include the general examinations in social sciences (history), natural sciences, and humanities, and the subject examinations in American history, American literature, analysis and interpretation of literature, biology, calculus with analytical geometry, calculus, English literature, Freshman English (with essay), general chemistry, introductory business law, introductory sociology, and money and banking.
Information concerning credit by examination, covering either University
courses or CLEP, may be obtained from the Counseling Center office.

## Honors

The University of Oregon offers special programs of study as a challenge to students of superior scholastic ability. Students interested in such programs may consult their major department or school for details. Recognition of outstanding scholarship is also provided through election to membership in several honor societies.
Honors College. The University of Oregon Honors College offers a fouryear program of study leading to the degree of Bachelor of Arts (Honors College). For further information see the Honors College section of this catalog.
Honor Societies. University of Oregon chapters of several national scholastic honor societies recognize exceptional distinction in scholarship through election to membership. Among these societies are : Phi Beta Kappa (liberal arts), Sigma Xi (science), Order of the Coif (law), Kappa Tau Alpha (journalism), Beta Gamma Sigma (business administration), Pi Kappa Lambda (music), and Alpha Lambda Delta and Phi Eta Sigma (both for freshmen).
Outstanding Students. Four significant awards of merit are traditionally given to outstanding students during Parents Weekend in May. A student-faculty committee chooses the recipients according to criteria set by the men and women who established the prizes.
The AAUW Senior Recognition Award goes each year to an outstanding Senior at the University. The Oregon State Division of the American Association of University Women criteria for selection are outstanding scholarslip, character, personality, contribution to campus and community life, and potential for future growth.
The Gerlinger Cup is awarded to a Junior for achievements in scholarship, leadership, and service to the University. This award was created in 1918 by Irene Hazard Gerlinger, first woman to serve on the University's Board of Regents.

The Maurice Harold Hunter Leadership Scholarship, awarded annually to a Junior with qualities of leadership, was established in 1948 in memory of Captain Hunter, class of 1941.

The Koyl Cup was created in 1918 by Charles W. Koyl, Class of 1911, and is to be awarded to the Junior who has shown the best all-around progress in areas of leadership, service, and academic achievement.

## Enrollment

Registration Procedure. A registration period is set aside, with published dates, preceding the beginning of classes in each term or session. Currently, the registration process takes place in McArthur Court ; students register by student identification number (Social Security number) in a period of time reserved for them. Complete registration instructions are contained in the Time Schedule of Classes, which is furnished to each student at registration. Students are officially registered and entitled to attend classes only when they have completed the prescribed procedures.

Students planning to register in a term of the regular academic year after absence of a term or more must notify the Office of the Registrar by filing a re-enrollment card several weeks before registration, to allow time for the preparation of registration materials. If notice is not given, registration will be delayed, and the student may become subject to penalties.

Graduate students will find re-enrollment procedures detailed on page 26 .
Students planning to register in a summer session should file, well in advance, a form stating this intent and supplying identifying and statistical information. This form is provided in the Summer Session Catalog and is also available from the Summer Session Office or the Office of the Registrar.

All regular students are required to file official transcripts of any academic work taken at other institutions since their first enrollment in the University ; a student's official records must be kept complete at all times. Exceptions are made only for "special" and "provisional" students who are formally admitted under individual arrangements, and for summer "transient" students, who are not formally evaluated and admitted. Any failure to file all required records is considered a breach of ethics, and may result in the cancellation of admission, registration, and credits.
The Student Health Center requires that all regular-session students returning after more than one year's absence be cleared through that office (call 686-4441 for appointment.)
Students who need to be registered at the same time in more than one unit of the State System (e.g., the University and the Division of Continuing Education) may accomplish this without paying excess fees, under the provisions for "concurrent enrollment." The necessary forms and instructions are available in the Office of the Registrar.

Academic Advising. Academic advising is regarded by the University as an extension of the teaching function and, therefore, as an important responsibility of the faculty. Faculty members are trained to provide a pleasant session for the student's first contact with the University's academic community. It is expected that students also will prepare for their advising session with advance study of the University's various published materials. Academic advisers communicate to students, particularly freshmen, the meaning of higher education and its significance to the student. Advisers also explain University academic requirements and assist individual students in building progranns which satisfy these requirements.

The Office of Academic Advising coordinates a general program of advising in which each student is assigned a faculty adviser, normally one who teaches in the student's major field. Students must have their first-term programs in the University signed by their advisers, and should consult with their advisers whenever they have academic problems.

Advisers for all students who have chosen a field of major study are assigned by major schools and departments; advisers for other students are assigned by the Office of Academic Advising. The Office of Academic Advising is affiliated with the Associate Provost for Student Affairs and is located in Friendly Hall.

Students are encouraged to meet with their academic advisers frequently.
Academic Procedure. The regular academic year throughout the Oregon State System of Higher Education is divided into three terms of approximately twelve weeks each. (Except for the School of Law, which operates on a semester calendar.)

The summer session supplements the work of the regular year, for which special announcements are issued. Students may enter the University at the beginning of any term, with the exception of Architecture students. It is important that freshmen and transferring students entering in the fall term be present for New Student Week. A detailed calendar for the current year appears in the opening pages of this catalog.

Students are held responsible for faniliarity with University requirements governing such matters as registration, academic standards, student activities, organizations, and the like. Complete academic regulations are included each term in the separately published Time Schedule of Classes, a
copy of which is furnished each student at registration.
When regulations are changed, the changes are effective on the date of their publication, unless a later date is indicated.
Academic Standing. The administration of the regulations governing academic standing is vested in the Committee on Scholastic Deficiency of the faculty. This committee may disqualify a student from attending the University of Oregon when it appears that work is of such character that he or she is not maintaining substantial progress toward meeting graduation requirements. In general, profitable and creditable work means substantial progress toward meeting graduation requirements. Any term or cumulative record which is considered unsatisfactory may bring the student's record under review by the committee. A student's progress is determined by the percentage of course work completed satisfactorily. Students who fail to pass a major portion of the work attempted will be reviewed by the committee. Further details on committee procedures are published each term in the Time Schedule of Classes.

## Alternate Methods for Earning Academic Credit

A variety of alternative means are available which enable students to earn credit toward graduation and thereby lessen the time and cost required for the usual four years of undergraduate study. Brief descriptions of these programs appear below. Additional information is available from counselors, the Office of Admissions, and from the academic departments concerned.

Advanced Placement: Students who have completed college-level studies in high school under the Advanced Placeneent Program sponsored by the College Entrance Examination Board, and who have received grades which meet the University requirement for creditable work, may be granted credit in comparable University courses upon matriculation to freshman standing.

College Level Examination: For some courses, departments have authorized the use of subject examinations prepared by the College Entrance Examination Board under its College Level Examination Program (CLEP). Examinations are available, for example, in American history, principles of economics, calculus, and biology. Students who have not completed their sophomore year may also take CLEP general examinations in the humanities, sciences, and social sciences. A score of 500 or better on
each general examination earns nine hours of credit toward graduation and fulfillment of the group requirements for the baccalaureate degree.
The University will accept for transfer credit, upon admission to the University, the successful completion of CLEP subject and general examinations by students.
Community Education: Individuals who want to enroll for a limited number of regular University courses without the formality of applying for admission may do so. A wide variety of courses are available for part-time, nonmatriculated persons of all ages. Further information on regulations governing enrollment and credit is available by phone or letter from the Office of Admissions, 270 Oregon Hall.

Course Challenge: Students may challenge undergraduate University courses by examination without actually registering in the courses. The rules governing credit by examination are as follows:
(1) The student's petition to the Academic Requirements Committee must have the approval of the individual faculty member administering the test and approval of the dean or department head.
(2) Arrangements for the examination must be completed at least one month before the examination date.
(3) The student must pay, in advance, a special examination fee of $\$ 15.00$ per course.
(4) The student is allowed only one opportunity to qualify for credit by examination in any given course.
(5) The student has the option of credit recorded with a mark of Pass (P) or Grade (A, B, C).
(6) Credit by examination may not be counted toward the satisfaction of the residence requirement.
(7) Credit by examination may be earned only in courses whose content is identified by the title in the University of Oregon catalog ; credit by examination may not be earned for special studies (199), courses numbered 50-99, 200 , or courses numbered 400-410.
(8) A student may not receive credit by examination in courses
(a) which would substantially duplicate credit already received;
(b) which are more elementary than courses in which previous credit has been received or status has been established.
(9) A student must be a regularly admitted student and registered for classes the term in which the examination is administered.

## Definitions

The material which appears under this heading defines some of the academic terminology in frequent use.

One credit hour represents approximately three hours of the student's time each week for one term. This time may be assigned to work in classroom or laboratory or to outside preparation. The number of lecture, recitation, laboratory, or other periods required per week for any course may be found in the Time Scheditle of Classes puhlished each term.
$A$ course is a subject, or an instructional subdivision of a sub ject, offered through a single term.
An open-ended course is one of those courses numbered 400-410 or $500-510$ for which credit is arranged and for which the instructor's permission is usually required.

A curricultum is an organized program of study arranged to provide integrated cultural or professional education.

Discipline is a branch of learning or field of study, e.g., mathematics, history, psychology.

A year sequence consists of three closely articulated courses extending through three terms of the academic year.
Prerequisite refers to a predetermined order in which courses must be completed before another can be taken; i.e., Mth 101 or its equivalent is prerequisite to Mth 102.

Any term, when it appears in the course-credit line, means the course may be repeated for credit.

Reading and conference is a particular selection of material to be read by an individual student and discussed in conference with a professor.

Residence credit is academic work completed while the student is formally admitted and officially registered at the University of Oregon.

A seminar is a small group of advanced students studying a subject under a professor, each doing some original research, and all exchanging results through informal lectures, reports, and discussions.

To reaive is to set aside without credit, upon application by petition to the appropriate faculty committee, certain requirements for a degree.

A term is approximately one-third of the academic year, either fall, winter, or spring (used interchangeably with quarter).

A semester is one-half the academic year.

One semester credit equals one and one-half quarter or term credit.

## Course Numbering System

Courses in University of Oregon catalogs are numbered in accordance with the course-numbering plan of the Oregon State System of Higher Education. The plan, as it applies to University courses, is as follows:

1-49: Remedial courses which carry no credit toward a degree.
50-99: Beginning courses in subjects taught in high school which carry credit toward the baccalaureate degree.
100-299: Lower-division courses.
300-499 : Upper-division courses.
400-410: Upper-division courses which may be repeated for successive terms under the same number, credit being granted according to the amount of work to be done. Certain numbers in this bracket are reserved for special types of work: 400 SEARCH; 401 Research or other supervised original work; 403 Thesis; 405 Reading and Conference; 406 Problems; 407
Seminar; 408 Workshop; and 409 Practicum; 410 Experimental Course. Informally termed open-ended courses, these generally do not have predetermined credits; credit is arranged.
400-499 with designation (G) or (g) : Upper-division courses which may be taken for graduate credit. Courses which may be taken for graduate major credit are designated (G) ; courses which nlay be taken for graduate minor or service-course credit only are designated (g).
500-599 : Graduate courses. Seniors of superior scholastic achievement may be admitted to 500 courses on the approval of the instructor.

500-510: Graduate courses which may be repeated for successive terms under the same number, credit being granted according to the amount of work to be done (credit hours arranged). Certain numbers in this bracket are reserved for special types of work: 501 Research or other supervised original work; 503 Thesis; 505 Reading and Conference ; 506 Special Studies ; 507 Seminar ; 508 Workshop; 509 Practicum; and 510 Experimental Course. In all divisions except the School of Law, Research (501) and Thesis (503) are classified as no-grade courses.

600-699 : Courses of a highly professional or technical nature, which count toward a professional degree only (not toward advanced academic degrees such as M.A., M.S., Ph.D.) .

## The Grading Sy'stem (Undergraduates)

The University grading system is based on a dual structure. When permitted by pertinent regulations, a student may elect to be marked on either a PassDifferentiated (A, B, C, D, F) or Pass-Undifferentiated ( $\mathrm{P} / \mathrm{N}$ ) system ( meaning graded or ungraded). To meet the requirements for a baccalaureate degree, at least 90 credit hours of all undergraduate work must be completed satisfactorily under the Pass-Differentiated system. Graduation requirements for most undergraduate majors include 186 credit hours of satisfactorily completed work. Each department, school or special program has its own regulations on ungraded courses for majors. Before exercising the ungraded option, students should confer with advisers. At least 45 of the 90 graded credit hours must have been taken in residence at the University.

Grades. Student work is graded or marked as follows: A, excellent ; B, good ; C, satisfactory; P, satisfactory or better ; D , inferior performance ; F , unsatisfactory performance (no credit) ; N , less than satisfactory performance ( no credit) ; I, incomplete; W, withdrawn ; $X$, no grade reported by instructor ; $Y$, no basis for grade ( $I$, $\mathrm{W}, \mathrm{X}, \mathrm{Y}$, are marks, not grades). Students ordinarily receive one of the four passing grades or N . Instructors may affix $[+]$ and [-] marks to the grades $A, B, C$, and $D$. When the quality of the work is satisfactory, but some minor yet essential requirement of the course has not been completed, for reasons acceptable to the instructor, a report of I (Incomplete) may be made. To remove an incomplete, a student must complete the course within the next four terms of residence in the University, but no later than three calendar years after the incomplete was awarded, or at such earlier date as the instructor, dean, or department head may specify. Graduate students are referred to page 28 of this catalog for time limits on the removal of incompletes.

Students may withdraw from a course by filing the proper forms in the Office of the Registrar in accordance with University regulations.

Pass-Differentiated (graded) : Passdifferentiated grades are: A, excellent ; $B$, good; C, satisfactory; D, inferior performance ; $F$, unsatisfactory performance (no credit).

Pass-Undifferentiated (ungraded): Under certain conditions, a student's work may be entered in University records with a grade of "pass' (P) or
"no pass" (N). Credits with a grade of $P$ are granted: (1) for courses offered only on a no-grade basis and so designated in the Catalog and Time Schedule of Classes; (2) for any University course at the option of the student, provided that the pass-undifferentiated option is not contrary to the policy of the division offering the course; (3) for courses in which the student receives advanced-placement credit ; (4) for work taken at another collegiate institution, in cases where the Director of Admissions is unable to evaluate the specific quality of the work in terms of the University grading system. A student who wants to exercise the passundifferentiated option in any course must do so at the time of registration, or within the period allowed for changes. Acceptability of credit earned with a mark of $P$ toward the satisfaction of major requirements is determined by the school, department, or committee directing the major program.

Grade-Point Average: For the convenience of students wanting such information, there is noted here the following numerical equivalents of pass-differentiated grades: A, 4 points per credit hour ; B, 3 points per credit hour ; C, 2 points per credit hour ; D, 1 point per credit hour ; however, the University no longer computes a grade-point average to determine eligibility for graduation.
Application for a Degree. Students who plan to receive a degree from the University of Oregon must make application by filing the proper form in the Office of the Registrar before the close of the third week of classes in the same term as the anticipated date of graduation ; late application will delay graduation. All University academic obligations must be satisfied before any degree will be conferred. Graduation dates and convocation exercises are scheduled toward the close of each of the four academic terms.

## Degrees Offered by the University

The University of Oregon offers the following degrees :

Honors College: Bachelor of Arts. Interdisciplinary Studies: Master of Arts, Master of Science.

Arts and Sciences: Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, Master of Fine Arts, Doctor of Philosophy, Doctor of Arts (English only). Architecture and Allied Arts: Bachelor of Arts, Bachelor of Science, Bachelor of Architecture, Bachelor of

Interior Architecture, Bachelor of Fine Arts, Bachelor of Landscape Architecture, Master of Arts, Master of Science, Master of Architecture, Master of Fine Arts, Master of Landscape Architecture, Master of Urban Planning, Doctor of Philosophy (Art History).
Business Administration: Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, Master of Arts, Master of Science, Master of Business Administration, Doctor of Philosophy.
Community Service and Public Affairs: Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science.

Education: Bachelor of Arts, Bachelor of Science, Bachelor of Education, Master of Arts, Master of Science, Master of Education, Doctor of Education, Doctor of Philosophy.
Health, Physical Education, and Recreation: Bachelor of Arts, Bachelor of Science, Bachelor of Physical Education, Master of Arts, Master of Science, Doctor of Education, Doctor of Philosophy.

Journalism: Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science.
Laze: Bachelor of Arts, Bachelor of Science, Doctor of Jurisprudence.
Librarianship: Master of Library Science.
Music: Bachelor of Arts, Bachelor of Science, Bachelor of Music, Master of Arts, Master of Music, Doctor of Musical Arts.
When requirements for degrees are changed, special arrangements may be made for students who have taken work under former requirements. In general, however, a student will be required to meet existing requirements at the time the degree is expected.

Students who plan their academic programs carefully may work toward a baccalaureate degree with more than one major.

The University of Oregon no longer requires nor authorizes a minor, although it is possible to earn a baccalaureate degree with more than one major.

For details on graduate degrees and departments offering them, please see the Graduate section of this catalog.

Details on major classification and procedures for change appear in the Time Schedule of Classes.

## Graduation Requirements

for the Baccalaureate Degree
Before the University of Oregon may confer a baccalaureate degree, an
undergraduate student who is a candidate for a degree must have fulfilled the requirements which are itemized below. These include a minimum number of credit hours, a required level of academic performance, certain basic courses, completion of study in three different groups of academic disciplines, specific requirements in language and literature or science or social science. The general limitations apply in some circumstances.
(1) Minimum Credit Hours
(a) Cumulative (passing grades only):
186 - B.A., B.S., B.B.A., B.Ed., B.P.E., B.Mus. degrees

220-B.Arch., B.F.A., B.I.Arch., or B.L.A. degrees
(b) Upper division:

62 credit hours of upper-division work for all baccalaureate degrees.
(c) Academic major:

36 credit hours in the major for all degrees; includes 24 credits in upperdivision courses. Specific requirements are listed by the department, school, or college.

## (d) Residence work at University of Oregon:

Of the 186 or 220 hours required, 45 of the last 60 must be taken at the University of Oregon-this applies to all degrees. Only University of Oregon work completed in residence through registration at the University as a regularly admitted student may be counted toward satisfaction of this requirement. Courses completed through Continuing Education or through the University Community Education Program (formerly Nonmatriculant) may not be counted as residence credit.
(e) Graded hours (A, B, C, D) : Ninety, of which a minimum of 45 credit hours must be earned at the University of Oregon as a regularly admitted student. Course work required in the major which is offered in this catalog as $\mathrm{P} / \mathrm{NP}$ only may be counted toward the 45 -hour requirement.

## (f) University of Oregon satisfactory work:

Eighty-five percent of all work graded A, B, C, D, P, F, N (I, X, Y are marks and are not counted as work completed) must be passed with grades of A, B, C, D, P. Ninety percent of credit earned A, B, C, D, P must be passed satisfactorily with grades of A, B, C, P-this applies to all undergraduate degrees. No credit is allowed for a grade of N or F . (The University of Oregon does not compute the grade point average [GPA]).
(2) Basic Courses Required for All Degrees
(a) Written English: six credit hours ( Wr 121 and either Wr 122 or Wr 123 or Wr 323 ) with grade of C or better. For exemption, see policy in English Department section of this catalog.
(b) Physical Education: five terms in activity courses (CPE 101-399; D 192, 292, 392; PE 194, 291, 292, $294,321,322,323,394,494)$ unless excused.
(c) Health Education: HE 150, 199, 211, 250 , or 440 .
(d) Group Requirements: study completed in a spectrum of courses is required by the University of Oregon to promote breadth in a liberal education. All students are required to register for and complete wotk in each of three groups-Arts and Letters, Social Science, and Science. The courses that will fulfill this requirement are listed below.

The exclusions that will not satisfy this requirement are courses numbered 199, 200, 400-410, all writing courses numbered below 200 , all courses numbered below 100 , and graduate courses numbered 500 and above.
The baccalaureate degree in the College of Arts and Sciences requires six courses of at least 3 credit hours each, completed in each of the three groups-Arts and Letters, Social Science, and Science.

The baccalaureate degree in a Professional School or College requires three courses of at least 3 credit hours each taken in each of the three groupsArts and Letters, Social Science, and Science-and an additional three courses in any of the three groups or any combination of the three groups. Courses listed may refer to current year only. For prior years, consult earlier catalogs.

No more than six courses in any one department may be counted toward satisfaction of the group requirement.

## Arts and Letters Group

Art History 201, 202, 203, 204, 205,
206, 207, 208, 209
Classics
Chinese and Japanese
English, Writing (except as noted below)
General Humanities 101, 102, 103, 131
General Literature 350, 460
German and Russian
Linguistics 150
Music 201, 202, 203
Philosophy 204, 212, 222, 301, 302, 303, 304, 305, 306, 411, 413, 416, 419, 423, 425, 427, 429, 430, 431, 432, 433, 434, $435,438,439,440,441,442,443,447$, 448

## Romance Languages Speech

Writing courses under 200 and other courses used for satisfaction of the written English requirement cannot be counted toward satisfaction of the Arts and Letters group requirement.
(Courses numbered 199, 200, 400-410, below 100, above 499, and Writing courses below 200 will not clear the above requirements.)

## Social Science Group

Anthropology (except those listed under Science)
Economics
Ethnic Studies
Geography (except those listed under Science)
History
Linguistics 489, 490
Philosophy 201, 202, 203, 205, 206, 210, 221, 307, 308, 309, 321, 322, 323, 324, $325,326,339,340,350,351,444,453$, $454,455,456,458,459,461,462,463$, 465, 468, 480, 481, 482
Political Science
Psychology 201, 214, 215, 216, 301, 353, $374,388,437$ (and courses of at least 3
credits numbered 411-429 and 451-499)
Religious Studies
Sociology
Women's Studies
(Courses numbered 199, 200, 400-410, below 100 , or above 499 will not clear the above group requirements.)

## Science Group

Anthropology 101, 104, 211, 320, 321, 322, 323, 324, 470, 474, 475, 476, 477, 479
Biology
Chemistry
Computer Science
General Science
Geography 101, 481, 482, 486, 487, 488, 489
Geology
Linguistics 290, 411, 412, 450, 451, 460 Mathematics
Physics
Psychology 211, 212, 213, 217, 218, 219, 302, 485 (and courses of at least 3 credits numbered 302-350 and 430-450)
(3) Specific Requirements
(a) B.A.-Language and Literature, 36 credit hours, and proficiency in a foreign language. The language requirement for a B.A. degree may be met in any one of the following ways:
(i) Satisfactory completion of at least 3 rd term, 2nd year foreign language.
(ii) Examination administered by the appropriate department, showing language competence equivalent to that
attained at the end of two years of college study.
Scores on the Foreign Language exam taken by incoming freshmen indicate the level the student might begin, not where one must begin.

Language and Literature Fields: Classics, Chinese and Japanese, Comparative Literature, English, General Literature, Linguistics 150, Romance Languages, Speech, Writing.
(b) B.S.-Science, 36 credit hours or Social Science, 36 credit hours:
(i) Social Science Fields: Anthro-
poligy (except those listed under
Science), Economics, Ethnic Studies, Geography (except those listed under science), History, Linguistics 489, 490, Philosophy, Political Science, Psychology (except those listed under Science), Religious Studies, Sociology, Women's Studies.
(ii) Science Fields: Anthropology

101, 104, 211, 320, 321, 322, 323,
$470,474,475,476,477,478,479$ ),
Biology, Chemistry, Computer Science, General Science, Geology, Geography 101, 481, 482, 486, 487, 488, 489, Linguistics 290, 411, 412, 421, $450,451,460$, Mathematics, Physics, Psychology 211, 212, 213, 217, 218, 219, 302, 351, 485 and courses numbered 430-450.
(4) General Limitations
(a) A maximum of 108 credit hours earned at an accredited community college or junior college may be counted toward the baccalaureate degree.
(b) Correspondence study : maximum 60 credit hours.
(c) Law, medicine, dentistry, technology : maximum, 48 credit hours in professional courses toward any degree other than a professional degree.
(d) A maximum of 24 hours with not more than 12 in any one of the following areas:
(i) Lower-division vocational technical courses.
(ii) Physical Education activity courses (normally CPE), except for majors in Health, Physical Education, and Recreation.
(iii) Studio instruction in Music, except for majors in Music.
(e) Music Majors: towards the B.A., B.S. degree, a maximum of 24 hours in studio instruction of which not more than 12 hours may be taken in the student's freshman and sophomore years.
(f) Changes of grades including removal of incompletes must be filed within 30 days after the granting of a degree.
(g) Undergraduate credits earned by Course Challenge (Credit by Examination) and College Level Examination Program (CLEP) are counted towards the satisfaction of baccalaureate degree requirements except the residence requirement. Grading option for Credit by Examination is on the basis of course listing in the Time Schedule of Classes. The University will grant ungraded credit for successful completion of CLEP examinations.
(5) Academic Majors

A student may be awarded a baccalaureate degree with more than one major by completing the following: (a) All general University degree requirements appropriate to each designated major.
(b) All requirements in each major as specified by the appropriate departments, colleges, or schools.
(6) Second Baccalaureate Degree A student who has been awarded a baccalaureate degree from an accredited institution may earn an additional baccalaureate degree at the University of Oregon. The student must satisfactorily complete all departmental, school, or college requirements for the second degree; of these requirements, the following must be completed subsequent to certification of the prior degree:
The student must complete an additional 36 credit hours in residence as a regularly admitted student if the prior baccalaureate degree was awarded at the University of Oregon, or an additional 45 credit hours in residence if the prior baccalaureate degree was not awarded at the University of Oregon.
(a) Eighty-five percent of all work graded A, B, C, D, F, N must be passed with grades of A, B, C, D, P (I, X, Y are marks and are not counted as work completed).
(b) Ninety percent of credit earned at the University of Oregon must be passed with grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}$, or P .
(c) A minimum of 18 credit hours must be graded (taken on passdifferentiated basis) if the prior baccalaureate was earned at the University of Oregon, or 23 credit hours if from another institution.
(d) Seventy-five percent of all course work in the major to be counted toward the second degree must be completed subsequent to the completion of work for the prior degree and certified by the major department.

## Tuition and Fees

Regular tuition charges paid by students enrolled in the institutions of the Oregon State System of Higher Education include instruction fees, health service, incidental, and building fees.

Payment of the stipulated tuition entitles students enrolled for academic credit to services maintained by the University for the benefit of students. These services inclucle : instruction in University courses; use of the University Library; use of Laboratory and course equipment and materials in connection with courses for which the student is registered; medical attention at the Student Health Center ; use of gymnasium equipment (including gymnasium suits and laundry service) ; admission to concert and lecture series sponsored by the University. No reduction is made for students who may not want to use some of these services.

Tuition is paid by all students under the usual conditions of undergraduate or graduate study, and is payable as specified in the Time Schedule of Classes or other official notices at the time of registration each term. Special fees are paid under the special conditions noted.

## Tuition Schedule

Tuition is specified for one term only; there are three terms in the regular academic year : fall, winter, spring (except for the School of Law which operates on a two-semester system). The sums listed below are tentative. When this catalog went to press, the Oregon State Board of Higher Education had not yet approved the tuition for the 1978-79 academic year. The Board reserves the right to make changes in the tuition schedule. The final tuition schedule will appear in the Time Schedule of Classes and other supplementary publications.
Undergraduate Tuition: Resident (one term)
Full-time registration:
$12-21$ credit hours .... $\$ 263.00$
Part-time registration:
1 credit hour .....-. $\quad 64.00$
2 credit hours .... 81.00
3 credit hours .... 98.00
4 credit hours .... 115.00
5 credit hours .... 132.00
6 credit hours .... 149.00
7 credit hours .... 167.00
8 credit hours .... 186.00
9 credit hours .... 205.00
10 credit hours .... 224.00
11 credit hours .... 244.00
Over full-time registration:
(per credit hour) 17.00

Undergraduation Tuition: Nonresident (one term)

Full-time registration :
12-21 credit hours .... $\$ 879.00$
Part-time registration :
1 credit hour ...... 115.00
2 credit hours .... 183.00
3 credit hours .... 251.00
4 credit hours .... 319.00
5 credit hours .... 387.00
6 credit hours .... 455.00
7 credit hours .... 525.00
8 credit hours .... 596.00
9 credit hours .... 667.00
10 credit hours .... 737.00
11 credit hours .... 808.00
Over full-time registration : (per credit hour) 68.00

Graduate Tuition (one term) NonResident resident
Full-time registration:
$9-16$ credit hours ... $\$ 402.00 \quad \$ 510.00$
Part-time registration :

| 1 credit hour .... | 84.00 | 96.00 |
| :--- | ---: | ---: |
| 2 cred lit hours ... | 121.00 | 145.00 |
| 3 credit hours ... | 158.00 | 194.00 |
| 4 credit hours ... | 195.00 | 243.00 |
| 5 credit hours ... | 232.00 | 292.00 |
| 6 credit hours ... | 269.00 | 341.00 |
| 7 credit hours ... | 316.00 | 400.00 |
| 8 credit hours .... | 359.00 | 455.00 |

Over full-time registration:
(per credit hour) 37.00
49.00

Law School Tuition (one semester)
Full-time registration:
9-16 credit hours .... $\$ 753.50 \quad \$ 915.50$
Part-time registration:

| 1 credit hour ...... 141.00 | 159.00 |  |
| :--- | :--- | ---: |
| 2 credit hours ... | 213.00 | 249.00 |
| 3 credit hours ... | 285.00 | 339.00 |
| 4 credit hours ... | 358.00 | 430.00 |
| 5 credit hours .... | 431.00 | 521.00 |
| 6 credit hours ... | 503.00 | 612.00 |
| 7 credit hours ... | 592.00 | 720.00 |
| 8 credit hours ... 672.00 | 819.00 |  |
| e full-time registration : |  |  |
| (per credit hour) 56.00 |  |  |

General Deposit. All persons who enroll for academic credit (except staff members and auditors) must make a general deposit of $\$ 25.00$ payable at the time of registration. The deposit is required for protection of the University against loss of or clamage to institutional property such as dormitory and laboratory equipment, military uniforms, Library books, and locker keys, and against failure to pay promptly nominal fines and assessments, such as Library fines, campus traffic fines, and Health Center charges. If at any time charges against this deposit become excessive, the student may be called
upon to re-establish the original amount. Refund policies are stated in The Time Schedule of Classes and on page 10 of this catalog.

## Special Fees

The following fees are assessed to University students under the special conditions noted.
Application Fee: $\$ 10.00$. This fee is required of students not previously enrolled at the University of Oregon.
It is payable when the application for admission is submitted. The fee is nonrefunclable.
Late Registration: $\$ 5.00$ plus. Students who register late will be charged a late-registration fee of $\$ 5.00$ for the first late day plus $\$ 1.00$ for each late day thereafter. Late registration paid by a returned check is also subject to the $\$ 5.00$ returned check charge. The regulation applies to both full-time and part-time students. The last day in each term to register without payment of penalty is: Fall, September 27, 1978; Winter, January 9, 1979 ; Spring, March 30, 1979.
Change of Program: $\$ 1.00-\$ 5.00$. This fee may be required for each change in the student's official program.
Exceptions to Procedures: $\$ 1.00$ $\$ 25.00$. Approved exceptions to procedural deadlines are subject to this fee.
Examination for Credit: $\$ 15.00$ per course. This fee is assessed for the privilege of taking an examination for advanced credit. The fee applies to each special examination regarcless of the number of credit hours sought.
Graduate Qualifying Examination: $\$ 1.00-\$ 15.00$. This fee is assessed to students taking the Graduate Record Examination or other standard tests of ability to do graduate work.
Counseling and Testing: $\$ 10.00$.
Transcripts: $\$ 2.00$. The first copy of an official copy of a student's University academic record is $\$ 2.00$; each additional copy furnished at the same time is $\$ 1.00$. The University reserves the right to withhold transcripts for persons who have unpaid financial obligations to the institution.
Replacement of I.D. Card: $\$ 4.00$.
Replacement of Certificate of Registration: $\$ 1.50$.
Reinstatement: $\$ 2.00$. The fee is assessed whenever a student is permitted to continue studies after having had registration cancelled for failure to comply with the regulations of the institution.

Returned Check: \$5.00. A penalty is imposed if any institutional charges are paid by a check which is returned because of an irregularity for which the person submitting it is responsible.
Senior Citizens: No charge. Persons 65 years of age and older not seeking academic credit nor working toward a degree are authorized to attend classes on a space-available basis. Charges for any special materials may be made. Incidental fee services are not provided.
Staff: $\$ 6.00$ per credit hour. University employees are permitted to enroll in University classes; academic staff enroll with the approval of the Payroll Department ; civil service staff enroll with the approval of the Personnel Office. Full-time employees are limited to 6 credit hours of work in any term; part-time employees may enroll for a maximum of 10 credit hours. The fee is nonrefundable.
Auditor: (1) Students registering totally as auditors will be assessed on the basis of course level. (2) Regular students will be assessed according to the schedule listed above. A student's academic record will carry no entry of audited courses.
Community Education: Students registered as nonmatriculants will be assessed on the basis of course level.

## Refunds

Fee Refunds: In the event of complete withdrawal from the University or a reduction in course load, refunds may be granted to students in accordance with the refund schedule on file in the University Business Office. All refunds are subject to the following regulations:
(1) Withdrawal or course reduction does not automatically result in a refund. Any claim for refund must be made in writing within the current term but no later than the close of the following term.
(2) Refunds in all cases are calculated from the date that the student officially withdraws from the University, not from the date when the student ceased attending classes, except in unusual cases when formal withdrawal has been clelayed through causes largely beyond the control of the student.
(3) No refunds will be made for any amount less than $\$ 1.00$.
(4) Refunds of incidental fees are subject to return of Certificate of Registration.
General Deposit Refund: The $\$ 25.00$ general deposit, less any deduction which may have been made, is refund-
able within the term following the term of withdrawal, if a request is made in writing to the Business Office. Otherwise an automatic refund is made not earlier than the sixth week following the close of the academic year.

## Automobile Fees

Although students are not encouraged to bring automobiles to the Cniversity, a minimum amount of parking space is available near the dormitories; regulations govern its use. Students who use University parking lots must purchase and display the proper parking permit. Student parking permits are $\$ 18.00$ for automobiles and $\$ 9.00$ for motorcycles during the regular school year ; student permits are $\$ 6.00$ during the summer session. All such fees, however, are subject to change.

Parking permits may be purchased during registration in the EMU and at other times from the Office of Campus Security in Straub Hall. Parking regulations are enforced at all times, and penalties for violations are imposed.

Bicycle registration with the Security Office is required. Bicycle racks and ramps are provided throughout the campus, and the development of cycling paths is underway both on campus and in the community. There is a city bus system.

A summary of University parking regulations appears in the Time Schedule of Classes. Copies of the complete regulations are available from the Office of Campus Security.

## Deferred Tuition

Students who experience difficulty in meeting payment of tuition at the time of registration may apply for a Deferred Tuition Loan to be repaid one-third at registration plus the general deposit and special fees. The balance is payable in two equal installments during the term. A service charge of $\$ 3.00$ is assessed,

Excluded from the deferred tuition loan are board and room, married housing rent, fines, deposits, program changes, and other special charges and fees.

Complete details of the Deferred Tuition Loan program appear in the fall 1978-79 Time Schedule of Classes.

## Community Education

Tuition for part-time, Community Education students enrolling for 6 credits or less is determined by the level of the courses taken : courses accepted for graduate credit are assessed at graduate tuition level; all others at the undergraduate level.

## Financial Aid

Costs of University Attendance. Because student living arrangements and personal spending habits vary widely, there is no single figure that represents the cost of attendance at the University of Oregon. The information presented below may be a useful guide for individual planning. Estimated costs to a student for one academic year are as follows:

Tuition and fees for Oregon resident undergraduates for the academic year 1977-78 were $\$ 246.50$ per term ( $\$ 739.50$ per year), and for out-of-state undergraduates, $\$ 829.50$ per term ( $\$ 2,488.50$ per year). Tuition and fees for post-baccalaureate and graduate students, for 1977-78, were $\$ 388.50$ per term ( $\$ 1,165.50$ per academic year), and for out-of-state graduate students, $\$ 437.50$ per term ( $\$ 1,312.50$ per academic year). Tuition and fee schedules are subject to revision by the State Board of Higher Education and may be increased for the 1978-79 academic year. (See page 9 for proposed increases.)

A general deposit is an annual requirement of $\$ 25.00$ payable at fall term registration to cover breakage, library fines, and other miscellaneous charges. The unused portion is returned approximately six weeks following the end of the school year.

Books and supplies average from $\$ 175$ to $\$ 250$ or more per year depending upon individual taste and the required reading lists.

Room-and-board costs depend upon location and personal style. Off-campus rentals range from $\$ 810-\$ 1,620$ for the school year, and food costs range from $\$ 900-\$ 1,500$ for nine months.

Dormitory room and board for 1977-78 ranged from $\$ 1,409-\$ 2,375$ per school year. Co-operative housing costs approximately $\$ 200$ less than the minimum dormitory rate for the school year. Sororities and fraternities range from $\$ 1,250-\$ 1,350$ for the school year.

Health insurance is optional. The cost by the term or for a full 12 month coverage may be purchased in the University Business Office. Coverage for dependents of students is also available.

Personal expenses are governed by individual preference but may include such items as car insurance, maintenance, and operation ; an optional University parking permit of $\$ 6.00$ $\$ 18.00$ a year; vacation and weekend travel; theater, movie, and athletic tickets, and other entertainment ; such incidentals as laundry, toilet articles, gifts, and dining out.

## Office of Financial Aid

Financial aid in the form of scholarships, grants, loans, and employment is available at the University of Oregon to eligible students who need assistance to attend school. The Office of Student Financial Aid provides counseling and informational services to students and parents, and administers a comprehensive program of financial assistance. The office is located in 270 Oregon Hall. Office hours are 9:00 a.m. to $4: 30$ p.m., Monday through Friday. The telephone is (503) 686-3221.

## Application Process

Entering freshmen, new graduates, and transfer students may apply for financial aid by completing a Financial Aid Form (FAF) and sending it to the College Scholarship Service for needs analysis. Please state on the form that the University of Oregon is to receive a copy.
Financial Aid Forms are available from the Office of Student Financial Aid and High School and Community College counselors.

To complete the application process, the student must also provide the following:
(1) Student Eligibility Report (SER); an undergraduate student must apply for a Basic Educational Opportunity Grant (BEOG), according to the instructions on the application, and submit to the University the SER which will be received from the BEOG Program.
(2) A financial aid transcript from any other postsecondary school the student has attended.
(3) Upon request, other documentation, such as verification of taxable and nontaxable income.

## Priority Deadline

A student who has completed the application process by Âpril 1, 1979 will be given priority consideration for available funds for the 1979-80 academic year. Those students will receive notification in early May.
Students who complete the application process after the priority deadline will be evaluated for financial aid eligibility, but awards will be contingent upon available funds.

## Financial Aid Eligibility

A student's financial aid eligibility is the difference between the cost of education at the University of Oregon and the expected family contribution. The student (and parents if the student is
dependent) is expected to bear the primary responsibility for meeting educational costs. Financial aid is available to fill the gap between potential resources and yearly educational resources.

## Assessment of Aid Eligibility

The University of Oregon uses the College Scholarship Services's method to assess a student's eligibility for aid. This system, approved by the federal government as a uniform method of evaluating a family's ability to meet educational costs, assures that each student will receive consistent and equitable treatment.

Financial aid counselors have the flexibility to deal with special circumstances on an individual basis. The cotunselors are available by appointment to see students and parents.
Parent contribution: To compute the parents' contribution from income, the College Scholarship Service method makes allowances for taxes, unusual medical and dental expenses, casualty and theft losses, employment expenses (for a single-parent family or when both parents work), and minimum maintenance costs (based on the number of family members). In considering assets, the College Scholarship Service method makes an adjustment for business or farm ownership and allowances for certain outstanding debts and asset protection (based on the age of the main wage earner in the family). An adjusted available income is determined and compared to a progressive taxation rate schedule to arrive at an expected parents' contribution.

Student contribution: If a student receives direct payments such as social security or veterans benefits, these are considered available resources. A percentage of a student's assets is considered part of the student's contribution. In addition, the University of Oregon expects each student to contribute a minimum of $\$ 200$ per term toward his or her education. When a student attends summer school or extenuating circumstances preclude the student from earning the expected contribution, a financial aid counselor may waive one-half the amount.

## Financial Aid Packages

Once a student's financial aid eligibility has been established, the financial aid counselor determines the student's award, financial aid package) based on the programs for which he or she is eligible. The Office of Student Financial Aid attempts to meet each student's financial aid eligibility. When that is
not possible because of program limitations or lack of funds, students will be advised of other sources of aid.

The Office of Student Financial Aid determines the amount of national direct student loan, supplemental educational opportunity grant, and college work-study for which a student is eligible. The basic educational opportunity grant, University scholarships, and state need grants and cash awards are determined by those responsible for the programs, but the amounts will appear on an award letter and are considered a part of a student's total financial aid package.
If a student is receiving a basic educational opportunity grant or need grant or cash award, that amount is deducted from his or her total resources to determine the net financial aid eligibility. Depending on the student's net financial aid eligibility, the counselor will award the student a supplemental educational opportunity grant plus college work-study or national direct student loan. If the student is not eligible for additional grants, he or she will receive either college work-study or a national direct student loan or both.
To be eligible for a supplemental educational opportunity grant, a student must be an undergraduate of exceptional financial need-his or her resources camnot exceed one-half the budget.
For the 1979-80 academic year, the maximum national direct student loan awarded-if the student is eligible-is $\$ 600$ per term for undergraduates, $\$ 750$ per term for graduates. Because a student may borrow only $\$ 2,500$ in National Direct Student Loans in the first two years of undergraduate work, eligible freshmen are awarded a maximum of $\$ 1,250$. The maximum College Work-Study award-if the student is eligible-is $\$ 500$ per term; the minimum is $\$ 250$ per term.

## Sample Packages

Notification of Financial Aid: A student who has completed the application process and who has been admitted to the University will be notified by mail of his or her financial aid eligibility. An eligible student will receive an offer of financial aid and information showing. the budget and resources considered in the evaluation. If the student wants to accept the award, the award letter and the statement of educational purpose must be signed before a notary and returned to the Office of Student Financial Aid within the specified time. A student not eligible for aid awarded
by the Office of Student Financial Aid will receive suggestions for alternative sources of funding in addition to the budget and resources information. Either the students or parents or both may make an appointment to speak with a financial aid counselor about the determination of eligibility. A change in financial status or a clarification of information previously supplied may warrant reevaluation of the financial aid eligibility.

Financial Aid Programs
Basic Educational Opportunity Grant ( $B E O G$ ): The BEOG Program provides grants (funds which do not require repayment) to eligible undergraduates to attend approved postsecondary institutions. To receive funds, an eligible student must submit a Student Eligibility Report (SER), see definition above, to the school and must be admitted and enrolled for at least six credit hours per term (half-time). The awards are reduced proportionately for less than fulltime students ( 12 credit hours per term). Basic Educational Opportunity Grants may be received for four years ( 12 terms) or five years ( 15 terms) if the program of study leading to the baccalaureate degree is designed for five years. Under current legislation, the maximum award a student may receive is $\$ 1,400$ or no more than one-half the educational costs. The award may be less than the entitlement if there are insufficient federal funds to cover all awards.

The BEOG Program determines the student's eligibility based on either the student's or parents' income and assets or both. The school will disburse the appropriate funds based on the student's eligibility index, as noted on the SER, and allowable educational expenses.
Students applying for other financial aid may apply for the BEOG for the 1978-79 academic year by following the appropriate instructions on the Financial Aid Form.
Within four to six weeks, the student will receive a Student Eligibility Report from the BEOG Program. This form must be submitted to the Office of Financial Aid if the eligible student hopes to receive the funds. Every undergraduate student applying for financial aid at the University of Oregon must submit his or her SER (regardless of eligibility).
Supplementary Educational Opportunity Grant: The Supplementary Educational Opportunity Grant
(SEOG) Program is designed to assist
undergraduate students with exceptional need. Supplemental grants, which need not be repaid, range from $\$ 200$ to $\$ 1,500$ per year. A student may receive no more than $\$ 4,000$ over four years.

In exceptional cases, a student may receive $\$ 5,000$ for a five-year course of study. Each SEOG must be matched with institutional aid. Every undergraduate student who applies for financial aid at the University of Oregon will be considered for a SEOG.
College Work-Study Program: The College Work-Study Program provides funds for employing students who qualify for financial aid. The Office of Student Financial Aid establishes jobs on campus and off campus with nonprofit, public and private service agencies. The federal government awards funds to the University to pay a portion of each eligible student's wages, and the agencies pay the other portion. Every student who applies for financial aid at the University of Oregon will be considered for College Work-Study Certification.

The report of college work-study awarded to a student states the maximum amount that may be earned. A student may work a maximum of 20 hours per week while school is in session. The student receives an hourly wage based on the type of work and his or her skill and experience. Although every attempt is made to relate a job to the student's course of study, it is not always possible. Upperclassmen and graduate students are more likely to secure jobs related to their major fields since these students usually have more training and experience.
National Direct Student Loan ( $N D S L$ ): The National Direct Student Loan provides long-term, lowinterest loans to eligible students. Funds for the loans are provided to the University by the federal government and the state of Oregon. Undergraduates may borrow up to $\$ 2,500$ for the first two years, $\$ 5,000$ for four years. Graduate students may borrow up to an aggregate of $\$ 10,000$ for both undergraduate and graduate study. To be considered for a National Direct Student Loan, a student must apply for financial aid.
Repayment of NDS Loans begins nine months after the student is no longer enrolled at least half-time in an institution of higher education. If a student returns to school after an absence and the loan is not in default, the payments may be deferred until he or she is out of school again. A student
may also be grantd deferred payment status while serving in the military, Peace Corps, or VISTA.

Interest is charged during the repayment period at the rate of three percent simple interest per year on the unpaid balance. Repayment is made through the University of Oregon Business Office on a schedule arranged at the time the borrower terminates at least halftime enrollment. The minimum repayment is $\$ 30.00$ per month; the maximum repayment period is 10 years. The business office bills quarterly. The money which the student repays to the University is made available to loan to other eligible students.
Scholarships: A limited number of University scholarships are available. These funds have been provided by private donors, organizations or businesses. Most scholarships are awarded on the basis of academic achievement as well as financial aid eligibility. For University scholarships other than departmental ones, the University Scholarship Committee evaluates the student's academic qualifications and selects the recipients.

Some schools and departments offer scholarships. A student who has selected a major field should talk to the school or department about application procedures and requirements. Graduate students also should consult the Assistant Dean of the Graduate School, Chapman Hall, Eugene, Oregon 97403.

For further information about scholarships which are available at the University, please write or telephone the Office of Student Financial Aid.

In the awarding of financial assistance, it is the policy of the University of Oregon not to discriminate on the basis of race, sex, religion, handicap, age, national origin, veteran or marital status.

The University of Oregon acknowledges the existence of some sexrestricted scholarships (wills and trusts) ; many of the scholarships were established before the advent of Title IX and are not subject to legal modification. The University of Oregon, in accord with regulations in the federal law known as HEW Title IX, is actively engaged in eliminating or neutralizing these sex-restricted scholarships.

Those scholarships which still contain sex-restricted provisions will be pooled in accordance with HEW Title IX regulations, Part 8.37 (2) : students will be selected for scholarship awards on the basis of criteria other than a student's sex. After the student has been
identified as a recipient, the L'niversity's Scholarship Committee will award scholarships from both sex-restrictive and nonrestrictive sources. If not enough scholarship monies are available through nonrestrictive sources for members of one sex, the institution will then be required either to obtain funds from other sources or to award less funds from the sex-restricted sources.
State of Oregon Cash Azuard and Need Grant: Cash awards are made to resident undergracluates who demonstrate great potential for academic success based on GPA and SAT or ACT scores as well as eligibility for financial aid. Awards vary from $\$ 100$ to $\$ 500$ per academic year, depending on the student's financial aid eligibility.

Need grants are awarded to resident undergraduates who have sufficient financial aid eligibility. Awards to attend the University of Oregon vary from $\$ 200$ to $\$ 500$ per academic year, depending on the student's eligibility for aid.

Cash awards and need grants may be renewed for twelve terms as long as the student applies each year and is eligible. The student must be enrolled full-time at an eligible school within Oregon and satisfactorily complete a mininnum of 12 credit hours per tern.

A student who hopes to be considered for a cash award or a need grant must complete a Financial Aid Form, submit it to the College Scholarship Service, and request that the Oregon State Scholarship Commission receive a copy. The Scholarship Commission determines the student's eligibility and notifies the student and the school which he or she plans to attend. The funds, which are provided by the state and federal governments, are disbursed by the school.

## Guaranteed Student Loans (GSL)

 and Federally Insured Student Loans (FISL): Federal and State Guaranteed Loan programs make funds available through the student's own bank. The student must be enrolled and in good standing or accepted for admission. The maximum loan for an academic year is $\$ 2,500$ for full-time undergraduates, $\$ 5,000$ for full-time graduate students. Oregon banks generally are loaning $\$ 1,500$ per academic year to full-time resident undergraduates. For some courses of study, full-time resident graduate students may be able to borrow $\$ 2,500$ per academic year from Oregon banks. Maximum loans may vary in other states.Repayment begins nine months following graduation or termination of
at least half-time enrollment. The minimum monthly payment is $\$ 30$; the maximum repayment period is 10 years. Interest is seven per cent per year on the unpaid balance. If the family adjusted gross income is less than $\$ 25.000$, the student qualifies for federal interest benefits, which means that the federal government will pay the interest on the loan while the student is in school. There is a processing fee of one per cent per year on the unpaid balance. This fee is collected at the time the loan is secured and also when extensions are made on repayment.

Applications for GSL and FISL are available at the Office of Student Financial Aid. The student (and parents if the student is dependent) completes the forms and submits them to the Office of Student Financial Aid for verification of any other aid and preliminary approval. The student then takes the forms to the designated lending institution for final approval. A nonresident student must submit the forms to the appropriate agency in his or her home state. Guaranteed Student Loans and Federally Insured Student Loans take six to eight weeks to process. The student's check is sent to the University for disbursement by the Business Office.
Law Enforcement Educational Grant and Loan: Full-time employes of law enforcement agencies are eligible for federal grants, up to a maximum of $\$ 250$ per term, to cover tuition and books for full-time enrollment at the University. Loans are available to in-service students to cover costs for tuition and books above $\$ 250$. The Law Enforcement Education Program (LEEP) at the University of Oregon is coordinated by the Wallace School of Community Service and Public Affairs. Applications for loans or grants may be obtained from the LEEP Coordinator. An interview with the Coordinator is required to determine eligibility.
The Office of Student Financial Aid will be pleased to provide additional and detailed information about the various financial assistance programs. Students wanting more information are invited to write or telephone the office.

## Exchange Students

University of Oregon students planning to attend other institutions in the United States on an exchange basis must apply for financial aid through the institution in which they will be enrolled. Except for the Basic Educational

Opportunity Grant (BEOG), financial aid cannot be transferred. Please note that priority deadlines vary from institution to institution. It is important to apply carly if one wants to be considered.

Exchange students from other institutions enrolling at the University of Oregon should apply to the University of Oregon for financial aid, following instructions under "Transfer Students" unless their home institution or state is providing financial aid.
Students who are receiving OSSC Cash Awards or Need Grants should inform the OSSC of their plans for the exchange program in order to preserve their renewal status. OSSC awards may be used at other state institutions if approved by the OSSC but cannot be used at institutions outside Oregon.

## Study Abroad Prograns

Timing is crucial if one plans to apply for financial aid to help finance studies abroad through an Oregon State System of Higher Education Studies Abroad Program. Applications with all required supporting documents must be completed by April 1. Write "Study Abroad" and the name of the program across the top of all financial aid forms. Check with a financial aid counselor regarding requirements such as power-of-attorney and transfer of monies to the proper state institution.

University of Oregon students accepted to participate in academic-year-study-abroad programs sponsored by the University of Oregon enroll at Oregon and receive resident credit. University of Oregon students also may arrange to participate in academic year or summer study programs sponsored by Oregon State University and Portland State University. For information about study-abroad opportunities, please consult International Student Services, 172 Oregon Hall, University of Oregon.

## University of Oregon Loan Fund

The University of Oregon Loan Fund has been established through donations and bequests for the purpose of aiding University of Oregon students in continuing their education. Information on funds available and questions on applications may be referred to the Office of Student Financial Aid.

Each year the funds have increased from interest on loans or investments of available cash. The Loan Fund is composed of two basic categories, shortterm and long-term loans.

Short-Term Loans
Under the Short-Term Loan Program, a maxinum amount of $\$ 150$ may be borrowed for thirty to ninety days. Loans up to $\$ 250$ may be made should emergency circumstances exist. A small service charge is assessed on the loans which are noninterest bearing. Eligibility requirements are: (1) Borrower must be enrolled half-time (six credit hours) or more. (2) No more than one short-term loan may be outstanding.
(3) Students may have no record of delinquent accounts with the University of Oregon.

## Long-Term Loans

The University Long-Term Loan Program provides for loans on a graduated scale of $\$ 200$ for freshmen, $\$ 400$ for sophomores, $\$ 600$ for juniors, and $\$ 800$ for seniors and graduate students; two co-signers are required. Faculty, staff, and students of the University are not eligible to co-sign. The maximum amount borrowed may not exceed $\$ 800$. The borrower must have completed one term at the University. Interest accrues at the rate of four per cent annually on the unpaid principal balance during at least half-time enrollment. The interest will accrue at six percent annually on the unpaid principal when the borrower terminates enrollment in the University.

All loans are repayable in equal monthly installments with the initial payment clue the first day of the fourth month after the borrower terminates enrollment.

## Student Employment

More than 65 percent of University of Oregon students are employed in part-time work in order to supplement income. The following information is intended to be of some help for students who seek employment either on the campus or in the community. Some students are ingenious in creating goods or services that fill a demand and provide income on an indepenclent basis.

## Campus

Student Employment is a part of the total service provided by the Office of Student Financial Aid. The Student Employment Office of the University and the Oregon State Employment Division assists University of Oregon students, their spouses, and dependents in finding part-time work. No fee is charged for the service. Students are
encouraged to register with this office upon arrival at the University and after determining class schedules. Openings are usually available in child care, gardening, and typing. Most other parttime jols fluctuate with the general employment situation in the Eugene area. The office is located in 262 Oregon Hall.
College Work-Study is a federally funded program. This program is designed to assist those students who are from low- and middle-income families who need funds to continue their education and who are accepted or enrolled for at least half-time study at the University. The on-campus and off-campus work-study jobs are limited to an average tof 20 hours per week during the school year. These jobs should not be confused with the employment offered by the State Student Employment Service. The College Work-Study Program is limited to those students whose financial aid eligibility has been determined on the basis of the financial statement(s) which are a part of the application for financial aid, and who are awarded work-study.
Office of Student Financial Aid: The University of Oregon receives an amnual appropriation from the federal government to make funds available through the College Work-Study Program for part-time employment of students whose parents can make little or no contribution to their higher education expenses.
Personnel Department: This office manages staff employment (Oregon Civil Service) at the University. Assistance is provided for spouses of students wanting civil service employment on campus. Information regarding general State of Oregon employment is also available. Enrolled students are not normally employed through this office; students may apply for work through the Student Employment Office. The Personnel Department is in 463 Oregon Hall.
Dormitories: Food Service and Resident Adviser positions are available in the dormitories. Dormitory residents are given first priority for these positions. Interested persons should consult dormitory food supervisors upon arrival on campus.

The Resident Assistant positions, open to both men and women, provide room and board in exchange for dormitory counseling responsibilities. Appointments are generally made by the end of April for the following school year. Applications àre due on or before

April 11. Apply directly to the Housing Office. Walton Hall.
Student Union: A variety of positions, including food service, are available in the Erb Memorial Union (student union). Inquiries should be sent to the Personnel Clerk, Erb Memorial Union.
Physical Plant: Students, both women and men, who seek custodial or grounds maintenance work should direct inquiries to the Physical Plant, University of Oregon.
Instruction and Research: Advanced students wanting to be considered for positions as assistants in instruction and research should apply to the head of their department. Reader positions are also handled by the departments, or by individual instructors.

## Community

Craft Sales: Many students with the necessary skills and equipment produce a wide variety of craft items for sale at local markets, retail outlets, specialty shops, and periodic outdoor events. Profits on such sales are generally low, however. Students selling craft items are urged to familiarize themselves with local ordinances governing such sales, since in some cases (food sales, for instance), various vending licenses are required.
Apartment Managers: These positions are usually advertised in the daily newspaper under "Help Wanted: Couples."
Restaurants and Taverns: Many students find employment in restaurants and taverns near campus. Flexible schedules and the possibility of tips make these jobs attractive.
Oregon State Employment Office: This office provides information and referral for jobs in the Eugene-Springfield area; the office is located at 432 W . 11th, Eugene, Oregon.
Szuitchboard: This is a local community information and referral service located at 454 Willamette, Eugene, Oregon; the telephone number is 686-8453.
Sales Clerks: A number of part-time jobs are available in shops near campus (including the University Bookstore), as well as throughout the EugeneSpringfield community.

## Services

for

## Students

## Student Housing

H. Philip Barnhart, B.S., Director of University Housing, with the Rank of of Professor. B.S., Pennsylvania State, 1947.

Donald Moon Lee, B.S., Associate
Director of Housing, with the Rank of Associate Professor. B.S., Oregon, 1956.

Marjory Ramey, B.A., Assistant
Director of Housing, with the Rank of
Assistant Professor. B.A., Oregon, 1947.

Linfield Cross, Food Service
Supervisor.
Fae Fochtman, Food Service
Supervisor.
Elva Koep, B.S., R.D., Food Service
Coordinator. B.S., Wisconsin-Stout Campus, 1967.
Teresa Peet, B.S., R.D., Food Service
Supervisor. B.S., Oregon State, 1972.
Patricia Smith, B.S., R.D., Food Service Manager. B.S., Oregon State, 1944.

Margaret Baldzwin, B.S., Complex
Director with the Rank of Instructor.
Richard Romm, B.A., Assistant
Director of Dormitories, with the Rank of Assistant Professor. B.A., California at Santa Barbara, 1958.
Mary Smith, B,A., Complex Director with the Rank of Instructor. B.A., Minnesota, 1957.
Neal Werner, B.S., Complex Director with the Rank of Assistant Professor. B.S., Oregon, 1976.

Willy Hart, B.A., M.S., Project Director with the Rank of Instructor. B.A., Webster College, 1974 ; M.S., Southern Illinois-Edwardsville, 1976.
Sue Tamiesie, B.S., Project Director, with the Rank of Instructor. B.S., Oregon, 1974.
John Thorpe, B.S., R.S., Building Maintenance Director with the Rank of Assistant Professor. B.S., Oregon, 1950.

Robert Minshall, B.S., C.P.A., Business Manager. B.S., Oregon, 1967.

## Student Personnel Services

Robert L. Bowlin, Ed.D., Dean of Students, with the Rank of Professor. B.S., 1953, M.A., 1958, California State Polytechnic; D.Ed., 1964, Oregon.

Shirley J. Wilson, Ed.D., Director, Office of Student Services, with the Rank of Professor. B.A., Whitman, 1952, M.A., Stanford, 1957, D.Ed., Washington State, 1978.
Joseph D. Wade, M.S., Associate Director of Student Services, with the Rank of Associate Professor. B.S., 1959, M.S., 1961, Oregon State.
Judith R. Bogen, M.Ed., Counselor, Office of Student Services, with the Rank of Assistant Professor. M.Ed., Western Washington State, 1961. Jane Farrand DeGidio, M.S., Counselor, Office of Student Services, with the Rank of Assistant Professor. B.A., Minnesota Central, 1968, M.S., Oregon, 1974.

George B. Wasson, M.S., Counselor, Office of Student Services, with the Rank of Assistant Professor. B.A., 1969, M.S., 1971, Oregon.
Donald McCarty, B.A., Director of Orientation and Coordinator of Student Conduct, with the Rank of Associate Professor. B.A., California at Riverside, 1958.

Linda A. Kizer, B.A., Assistant Director of Orientation. B.A., Oregon, 1974.

Neil Murray, Ph.D., Directór of Career Planning and Placement with the Rank of Associate Professor. B.A., B.Ed., 1964, M.Ed., 1967, Western Washington State College ; Ph.D., 1971, Oregon.
Theresa M. Ripley, Ph.D., Assistant Professor of Education (group procedures, career development). B.S., Illinois State, 1966 ; M.S.Ed., Indiana, 1968, Ph.D., Oregon, 1971.
W. Sanford Heins, M.S., Coordinator of Educational Placement. B.A., Seattle Pacific College, 1963, M.S., Central Washington State College, 1967.

June W yant, M.L.S., Career Information Specialist. B.A., 1970, M.L.S., 1971, Oregon.
Thomas J. Mills, Ph.D., Director, International Student Services with the Rank of Associate Professor. B.A., 1963, M.S., 1967, Ph.D., 1974, Oregon. Mary E. Litchman, Special Assistant, Foreign Stuclent Adviser, with the Rank of Instructor. A.A., 1942, Mesa College.

## Housing

Students at the University of Oregon are free to choose their own living arrangements from a variety of accommodations provided both by the University and by the community. Minimum regulations have been established for mutual convenience. It is expected that students will conduct themselves with the same respect for the comfort and property of others, the payment of financial obligations, and the general responsibility for order that is expected of all persons living in the community.

The following information lists the University-owned housing available and procedures for making reservations. A section is also devoted to the kinds of private rentals available with some advice on procedures.

## Dormitories

The University maintains six dormitory complexes which house approximately 2900 students; names of the five main campus dormitory complexes are Bean, Carson, Earl, Hamilton, and Walton. The sixth dornitory, University Inn, is five blocks west of the campus. Single and multiple rooms are available in all dormitories, including units reserved for freshman, upper-division, and graduate students; entire floors are reserved alternately for men or for women; University Inn offers living in areas either segregated by sex or coed. Most other dormitory complexes devote the living units entirely to one sex or the other.
Facilities: The following services are provided to dormitory residents: (1) food service: 20 meals per week except during vacations (no meals are served Sunday evenings) ; (2) bed linens, carpeting, lounge chairs in single rooms; (3) draperies, desk lamp, study chair ; (4) recreation: color television, table tennis, vending machines, basketball standards, tennis courts ; (5) coinoperated washers, dryers, ironing boards; (6) locked storage space for luggage; (7) telephones: floor phones for campus calls, pay phones, and private phones available for an additional charge, except for University [nn where private phones are provided;
(8) refrigerators available for extra charge.
Costs: The following rates for room and board have been recommended for the 1978-79 academic year :

|  | Multiple Room | Single Room |
| :--- | :---: | :---: |
| Term | and Board | and Board |
| Fall | $\$ 668$ | $\$ 869$ |
| Winter | 445 | 579 |
| Spring | 371 | 482 |
| Total | 1484 | 1930 |

University Inn, on Patterson Street, offers additional services and private baths. The rates are:

| Fall | $\$ 869$ | $\$ 1129$ |
| :--- | ---: | ---: |
| Winter | 579 | 752 |
| Spring | 482 | 627 |
| Total | 1930 | 2508 |

These charges are payable at the beginning of the term, or in two installments, the first at the beginning, the second at a fixed date during the term. A ten-day leeway is allowed at the beginning of each term, after which a $\$ 1.00$ per day late penalty fee is charged. If fees are not paid within twenty days, University eviction and collection procedures will be initiated. Hall dues are $\$ 3.00$ per term.

Note: When the actual expense of operation exceeds the housing budget by 3 per cent or more, the Oregon State Board of Higher Education may exercise its right to increase rates.
Reservations: Reservations should be made as soon as possible before the opening of the school year, if possible with the application for admission; a reservation form is provided along with the form for application for admission. However, a dormitory reservation may be made at a later date if one prefers. Priority for filling reservations is determined by the date applications are received in the Housing Office. Inquiries may be addressed to the Housing Office, University of Oregon, Eugene, Oregon 97403. The dormitory application forms must be accompanied with a $\$ 50.00$ deposit.
Contract: Dormitory residents are required to sign a contract-the terms and conditions of occupancy-which explains rights, privileges, and responsibilities of dormitory residency. These terms are based on consideration for other residents, health and safety standards, and compliance with estab!ished laws and the University Conduct Code. Failure to comply with the terms and conditions of occupancy may lead to eviction.

Roons are available only to those who agree to room and board in a dormitory throughout the entire school year (except Summer Session; see
below). However, while remaining in the University, a student may be released from contract by providing a satisfactory replacement or by the payment of $\$ 1.00$ a day for the remaining days in the school year ; in either case, the $\$ 50.00$ deposit is forfeited.

Cancellation of dormitory reservations must be made in writing to the Housing Office by August 1 for fall term or at least 14 calendar days before winter or spring term begins. Forty dollars of the $\$ 50.00$ deposit will be refunded; $\$ 10$ of the deposit will be retained as a processing fee. If notification of cancellation is received after August 1 for fall term or less than 14 calendar days before winter or spring term begins, the entire $\$ 50.00$ deposit will be forfeited.

Charges for room and board are made on a full term basis. If persons withdraw from the dormitory and the University before the tenth week of the term, any unearned room and board payments will be refunded according to an established schedule. Board charges during an absence from Eugene of ten or more consecutive full days are refunded at the rate of $\$ 2.00$ per day.
Vacations: There is no food service during vacation breaks. Students may remain in their rooms during Thanksgiving at no charge. Students who remain during Christmas and spring breaks may be moved to one unit and are charged an additional fee ( $\$ 30.00$ and $\$ 15.00$ respectively).

Dormitory facilities are available to married couples at the regular doubleroom and board rate for each person. In addition, housing and food services are available to workshop and conference groups. Address inquiries to Housing Office, Walton Hall.
Student Jobs: Part-time kitchen jobs for students are available in the dormitories, with dormitory residents given first priority. Applications may be made to the dormitory food-service supervisor.
Sorority and Fraternity Rushees: Students hoping to join a fraternal living group and to continue living in a dormitory, should make a dormitory reservation. Reservations are not necessary for rushees not planning to live in a dormitory. Students who do not pledge a sorority or fraternity at the end of rush week may reserve a dormitory room if space is available.
Summer Session: Summer Session students may select seven- or five-day board: the five day week includes Monday breakfast through Friday lunch
with the option to purchase weekend meals on a per-meal basis. A contract for both roons and board is required. Students withdrawing from the University will be released from contract.

## Student-Family Housing

University-owned apartment housing is available to married students with or without children and to single students with children. Westmoreland, three miles from campus, has 408 one- and two-bedroom furnished apartments. Rent* is $\$ 98.00$ and $\$ 115.00$ per month. Designed for comfort and easy care, these apartments have electric heat and appliances, ceramic tile baths and ample storage ; the grounds are landscaped and maintained the year round. Excellent public bus service to the campus is available. An elementary school and a shopping area are within walking distance.

Amazon, a much older complex within walking distance of campus, has 246 unfurnished two-bedroom units. Schools and parks are nearby. Rent* is $\$ 80.00$ per month and includes water, garbage collection service, and television cable. Tenants provide stoves and refrigerators; a few of these appliances are available to rent from the University. (*Rates for 1977-78, subject to change.)

Both Westmoreland and Amazon have playgrounds for children ; a recreation center for tenants' social assemblies is available. Cooperative nursery schools operated by parents of three- and four-year olds are available in each project. Modern coin-operated laundries are located in both communities.

To be eligible for student family housing, students must be enrolled for a minimum of course work as follows : graduate fellows holding half-time appointments, 6 credit hours; graduate fellows holding one-third-time appointments, 9 credit hours; other graduate students, 9 credit hours; undergraduates, 12 credit hours. Graduate students holding appointments for more than half-time are not eligible. A $\$ 20.00$ security deposit is required for all family housing.

Those applicants with net income low enough to qualify for financial aid will be given special consideration in assignnment. Assignments are made to graduate assistants first, then graduate students, then undergraduates in descending order of class standing. Date of application is used to assign each priority classification. Assignment is generally possible during the school year.

Occupancy of an apartment is restricted to members of one fanily, and the following maximums are allowed in tenant occupancy: one-bedroom apart-ments-two adults and one child under the age of one year; two-bedroom apartments-two adults and two children over the age of one year and one child under the age of one year. Pets are not allowed in either Amazon or Westmoreland housing.
Miscellaneous Housing for Student Families: Over 100 miscellaneous innfurnished houses located adjacent to the campus are owned and rented to stuclent families by the Housing Office according to a priority that includes student status, size of family, and date of application. Pets are permitted in many of these units. Monthly rents are set as near to the local rental market rate as possible. The rental contract is on a monthly basis and currently includes a $\$ 20.00$ security deposit. Inquire at the Housing Office, Walton Hall.

During the Summer Session, dormitory facilities are available for married couples without children at the regular clouble-room and board rate for each? person. Inquirles about Student-Family Housing should be made to the Housing Office.

All rental rates are subject to change by the Oregon State Board of Higher Education ; the Board reserves the right to increase rates during the year when actual expenses of housing operations exceed budgeted expenses by three percent or more.

## Co-operatives

Each of the four co-ops is a studentowned ancl operated living organization. The co-ops are able to provide room and board at lower cost than dormitories because each member shares in the responsibility for upkeep and maintenance. Membership in the co-ops ranges from thirty to forty students per unit. All four houses are within one block of campus.

At University House, a co-ed house at 791 East 15 th Avenue, and Parr Tower, a women's house at 1648 Alder Street, each resident owns approxi mately $1 / 82$ of the business enterprise for the period rent and board are paid.

Study rooms are shared with one to three other people, depending upon the size of the room. Everyone sleeps on an unheated sleeping porch with bunk beds; private study rooms and sleeping porches are located on the second and third floors.

The main floor and basement are considered the public areas. The first
floor inclucles the head resident's apartment. kitchen, dining room, living room, and television room. The recreation room, bike room, laundry, and library are located in the basement.

The following services are available in these two co-ops: (1) Professional cooks prepare lunch and dinner Monday through Friday and make preliminary preparations for weekend meals:
(2) bunk beds and mattresses: (3) desk and chair: (4) recreation : piano, television, stereo, and vending machines; (5) washer and dryer, ironing boards; (6) storage space, study room, closet, drawers; (7) telephone: floor phones for campus and local calls.

Philadelphia House, a Christian men's living unit, is located at 1883 University Street. Facilities include Newton Chapel, separate sleeping porches and study rooms, a parking lot, and complete laundry facilities. Recreation facilities inclucle a piano. television, stereo, and table tennis equipment. A professional cook prepares weekday lunch and dinner meals and makes preliminary preparations for weekend meals. Elected officers lead the house, and each member may participate in the government of the house through weelly house meetings and committees. The incorporated board of directors is elected from the membership and from the clergy and laity of the community.

Campbell Club, 1670 Alder, houses men and women students. Rooms, for two persons, include individual desks, chairs, and ample closet and dresser space. Campbell Club also provicles a large living room, den, dining room, kitchen, basement, laundry facilities, luggage room, University extension phones and a pay phone, study roons, and recreation facilities. Professionally cooked meals include dinners six days a week. Other meals are prepared by students who reside in the house. Campbell Club is self-governing, with annually elected officers.

Requests for applications or further information may be directed to the addresses above.

## Fraternities and Sororities

Fraternities and sororities provide comfortable small group living accommodations with homecooked meals. There are quiet study rooms, and someone is available to help if studying problems arise. There are also areas for recreational and social activities. Fraternities and sororities also provide quiet sleeping areas.

Each chapter house offers the incli-
vidual an opportunity to become part of a community made up of people with many different interests and motivations who are held together by personal friendships and affiliation. There is an opportunity for involvement in socialand service-oriented activities both on the campus and in the community.
"Rush" is the term that fraternities and sororities use to describe the process of choosing new members. Rush period, which includes house visitations, is scheduled before fall registration to permit students time to get acquainted with each other and to meet members of the various fraternities and sororities. If you plan to attend fraternity or sorority rush and are uncertain about fall term housing plans, it is not necessary to reserve a room in a dormitory for the academic year until after a decision on pledging. Dormitory rooms are guaranteed to students who do not pledge; however; roommate choice will be more limitet at this time. Informal rush continues throughout the academic year, so cleci= sions nuay be made at a leisurely pace.

Costs for room, board, and social fees vary from one house to another. Yearly costs for sorority members average $\$ 1,450$ for the first year ; fraternity costs average $\$ 1,350$. Dormitory residents belonging to sororities or fraternities pay an average bill of $\$ 16.00$ per mohth for weekly guest meals at the chapter house, social events, and dues. Monthly or quarterly arrangements may be made for payment of room, board, and chapter activities.

Sororities at Oregon include: Alpha Chi Omega, Alpha Delta Pi, Alpha Omicron Pi, Alpha Phi, Chi Omega, Delta Delta Delta. Delta Gamma, Gamma Phi Beta, Kappa Alpha Theta, Kappa Kappa Gamma, Pi Beta Phi, and Sigma Kappa.

Fraternities include: Alpha Tau Omega, Beta Theta Pi, Chi Psi, Delta Tau Delta, Delta Upsilon, Kappa Sigma, Phi Gamma Delta, Phi Kappa Psi, Pi Kappa Alpha, Sigma Chi, Signa Alpha Epsilon, Sigma Nu, Sigma Phi Epsilon, and Theta Chi.

Students interested in more information about fraternities and sororities should direct requests to the Interfraternity Council (men) or Panhellenic (women), Erb Memorial Union.

## Off-Campus Housing

There is an inadequate supply of acceptable low-cost housing in Eugene. Finding an inexpensive place to live may be a time-consuming problen, especially if one has pets, is looking for
something near campus, or wants to live alone.
Apartments: Most students live in oneor two-bedroom apartments within a mile of campus. In that area, rents are generally 10 to 20 percent higher than in the rest of Eugene-Springfield and range from $\$ 120.00-\$ 185.00$ for furnished one-bedroom apartments. Some studios and quad apartments are available for $\$ 85.00-\$ 125.00$. A quad is a single sleeping room with kitchen and bath facilities sometimes shared with three other units. Two-bedroom apartments cost from $\$ 180.00-\$ 260.00$ Most buildings have coin-operated laundry machines. Tenants are often required to pay their own utility bills in addition to the stated rental fees.
Houses: Single-family houses are the most popular housing option. Because they are so popular, demand far exceeds available supply. Finding a house may take a long time; one must check the newspapers, bulletin boards, and referral services. Many houses are passed on among friends and never advertised. Many are rented from a window or lawn sign, and never appear in the newspapers or referral lists.
Rooms and Roommates: A few rooms are available in private homes. There are a few boarding houses in Eugene. Some students rent large apartments or houses, then rent rooms or look for roommates. For most students the only way to raise enough rent money is to share an apartment or house with one or two others.
Finding a Place: Off-Campus Housing (Suite 3, Erb Memorial Union, University of Oregon) maintains a free referral for all types of rental housing. This office has information about houses, apartments, studios, rooms, quads, and temporary quarters. There are also lists of people looking for roommates. This is all kept on bulletin boards in the hall outside the office. In addition to the referral service, the office has maps of Eugene, model rental agreements, inventory-and condition reports, information about landlordtenant law, and a courtesy phone-all free of charge. The Oregon Daily Emerald, the Springfield News, the Willamette Valley Observer, and the Eugene Register-Guard carry classified advertisements of rentals. The latter is available in many county libraries; a look at the newspaper before arriving in Eugene will provide an idea of costs and where to look. The best rentals appearing in the papers are usually taken within a few hours; experienced students get the papers as they come off the press.

Many bulletin boards scattered around campus and in stores near the University, and several boards in the Erb Memorial Union have information about available housing. Many real estate firms rent apartments and houses in the Eugene area. Also, two commercial rent-referral services operate in Eugene. Confer with Off-Campus Housing for more information.
Written Leases: Most landlords require tenants to sign some sort of agreement. Read it carefully. Ask for an explanation of any provisions you do not understand, and request modification of those that appear unreasonable. Most rental agreements are designed to protect the landlord, not the tenant. In the absence of a written agreement, the landlord can evict a tenant for nonpayment when the rent is ten days late. The landlord can also evict a tenant with thirty days written notice.

Copies of a model rental agreement are available from Off-Campus Housing.
Deposits: Most landlords require a deposit (damage, cleaning, or security) to cover any damage the tenant may cause beyond normal wear and tear. Problems may arise when the tenant moves out and asks for a deposit refund, regardless of the condition of the dwelling. There may also be honest disagreement about the condition of the dwelling, or about what each party had promised to do. It is important to read the lease or rental agreement carefully. Be sure you understand what the deposit is for and under what conditions it will be returned. Write down any promises which the landlord makes orally, and have him sign the list.

To help assure that the deposit will be returned properly:
(1) Complete an Inventory-andCondition Report upon moving in. These are available from the OffCampus Housing Office. Make two copies; give one to the landlord after he signs it, and keep one.
(2) Keep a receipt or cancelled check to verify payment of deposit and the exact amount.
(3) Clean the unit thoroughly before leaving, and then ask the landlord to inspect it. During the inspection, complete another inventory form.
(4) With the landlord, agree upon the amount of the deposit to be refunded, and the date by which it should be received.

Consult the Off-Campus Housing Office for further advice on deposits, or if problems arise.

## Student Personnel Services

The University offers to students an integrated program of counseling and assistance under the direction of the Dean of Students. The dean's staff has responsibility for orientation, general personal counseling, career planning and placement, the conduct program, assistance to international students, assistance to older students, advising student living organizations, coordinating assistance to physically handicapped students, and other aspects of student welfare.

Office of Student Services. The Office of Student Services is at the service of students who need help with resolving problems that interfere with academic progress. The staff gives general information about the University and its varied campus learning resources, and is ready to help with specific student concerns, including counseling those with individual problems and providing written recommendations. Staff members also serve as advocates for students in administrative and academic conflicts, consult with students about scholastic deficiency problems and, should the need arise, advise about reinstatement to the University. The office is in 164 Oregon Hall.
Lifelong Learning Services. The staff of the Office of Student Services helps people who have been away from high school or college classes for a number of years and want now to resume their education at this University. These students are offered pre-enrollment information and advice, help in resolving procedural problems, and general assistance to ease the return to the classroom.
Handicapped Students. Individual assistance is available for physically handicapped students through the Office of Student Services. This may include help in class planning and registration, coordination of volunteer services, or a planned modification of architectural barriers. Several off-campus agencies and many offices throughout the University cooperate to keep these services at maximum effectiveness. For information, consult the Office of Student Services, 164 Oregon Hall.
Orientation Office. All programs dealing with orientation for undergraduate students are the responsibility of the Orientation Office. These programs include:

Early Orientation and Registration Program: The Early Orientation and Registration Program (EORP) is a
specially arranged opportunity for entering freshmen to get academic advising and to register early, during the month of July, for fall term classes. By participating in EORP, entering freshmen can begin their academic careers during the summer lull, without the pressures of fall registration added to the period of adjustment to a new environment. Parents are also invited to take part in EORP so that they may learn about the University, its personnel, and programs.

Nere Student Week: This is an annual variety of experiences and encounters between new students and the University of Oregon. Held during the week of fall term registration, New Student Week helps new students feel at home at the University, meet other students, and discover campus and community resources for the fulfillment of educational goals.

International Student Orientation assists foreign students entering the United States and the University of Oregon for the first time. The program includes an introduction to the academic system of the University, its social and cultural environment, and may include a temporary stay with a host family in Eugene.

Special Programs and Assistance: Upon request, the Orientation Office cooperates with any campus office or group to plan and present special orientation programs for undergraduate students. The help offered includes planning and arranging printed materials, physical facilities, workshops and other projects. The Office is in 164B Oregon Hall.

University Counseling Center. The University Counseling Center, staffed by professionally trained counselors, provides services for the benefit of students. Resources, including testing, are provided to assist in making decisions regarding personal and academic concerns, career choices, and problems in interpersonal relationships; marriage and premarital counseling are also available. Staff members offer group process consultation to the various departments of the University and, upon request, will consult with faculty members or students on either behavioral or mental health problems. Except for a modest charge for testing, there is no fee for Counseling Center services.

The Counseling Center serves as a coordinator for most of the national testing programs, such as the College Level Equivalency Program (CLEP), the College Entrance Examination Boards, the Graduate Record Examina-
tion, and the Law School Admission Test. Application forms and registration materials for these programs are available at the Counseling Center, 150 Susan Campbell Hall.
The Crisis Center, a telephone service supervised by the Counseling Center, operates evenings and weekends.

The Counseling Center also offers cloctoral internship training and practicum courses for graduate students in counseling psychology.
Career Planning and Placement Service. Career planning and placement services are available to students from all departments on campus and to University of Oregon alumni. Services include assistance in career planning to undergraduates deciding on career alternatives, and to persons seeking a second career; placement help for graduating students and alumni looking for new or better positions; workshops covering resumé writing, job search, and interviews; job listings and recruiter services.

Students who are currently enrolled, alumni, and persons who have completed twelve or more credit hours at the University are eligible to register for placement service.

The offices of Career Planning and Placement Service are in 246 Susan Campbell Hall.
Student Conduct Program. The University operates under a progressive student-conduct program which is designed to protect the health, safety, and well-being of everyone within the University community at the same time that it protects the educational objectives of the University.

A faculty-student committee has primary responsibility for formulating and evaluating student-conduct policies and procedures. The program is administered by the Coordinator of Student Conduct, whose office is in 164B Oregon Hall.

The Code of Student Conduct and detailed information concerning the Student Conduct Program appear in the Student Handbook section of the Time Schedule of Classes.

International Student Services. The Office of International Student Services assists American students who are planning to study or teach abroad as well as students and faculty who are temporarily in the United States to study or teach at the University of Oregon. The following is a listing of the services extended by this office:

Study Abroad Assistance. University of Oregon students are provided up-to-date information on foreign
universities and overseas programs; advice about transferring credits from foreign universities; help in locating information about scholarships, financial aid, passports, and visas.

International Student Services, 172 Oregon Hall, also provides information and advice on Fulbright-Hays and Rotary scholarships for overseas study.

Study Abroad Opportunities. The University of Oregon offers study abroad opportunities through the Oregon Study Centers at the University of Stuttgart, Germany; the University of Poitiers, France; Waseda University, Japan ; and the University of Guadalajara, Mexico. There is a business program at The Netherlands School of Business, Breukelen; and a music program at the Center for International Music Education, Reading, England; and through the Northwest Institutional Council on Study Abroad, Oregon students may participate in programs in Avignon, France; London, England; and Köln, Germany. For upper-division and graduate students, there are wideranging seminars at the Inter-
University Center Post-Graduate Studies in Dubrovnik, Yugoslavia. Also, summer programs are offered in Perugia, Italy; Germany, Austria, and Mexico.

Foreign Student Advising. Students and faculty who are temporarily in the United States to study or teach at the University of Oregon are given help with government regulations, visas, admission to the University, scholarships, employment, adjustments to the procedures of American higher education, personal problems, and general adjustment to life in the United States.
National Student Exchange. The University of Oregon is a member of the National Student Exchange (NSE) and welcomes to this campus the state college and university students who qualify for participation in the program. The exchange program gives students an opportunity to study at an educational institution in a new setting and to become better acquainted with the varied social, educational, and cultural patterns in the different geographical areas of the United States. Through NSE, students may take advantage of specialized courses or unique programs perhaps not available on the home campus. Participation in the program is limited to one year.

To qualify, a student should be in the sophomore or junior year during the exchange and be a full-time student in good standing at his or her home campus.

Tuition is assessed by the host institution at the in-state (resident) rate.

Further details are available at the office of International Student Services, 172 Oregon Hall.

## Academic Advising

The Office of Academic Advising provides information on the general University graduation requirements, and assists students in choosing major programs of study. The office also coordinates the advising program for students who have not declared a major, by assisting undeclared students through a program of premajor advising. When an undeclared student chooses a major, the student is referred to the appropriate department or school.

The Office of Academic Advising coordinates all the advising for new students. The office conducts workshops to acquaint faculty members with the advising system and with the academic requirements and regulations. Faculty members are encouraged to make the new student's first encounter with the University's academic community a pleasant and informative experience. Students nay prepare for their advising sessions in advance by attending workshops conducted by Academic Advising, or by reading Of Course, an annual publication of Academic Advising, and by studying this catalog.

The Office of Academic Advising is in 107 Friendly Hall.

# Student Health Center 

Avard C. Long, M.D., Director. Herbert C. Lemon, M.D., Associate Director. Associate University Physicians: Paul S. Bassford, M.D., Frank L. Baynes, M.D., Wilford A. Brooksby, M.D., Stanley A. Brown, M.D., Frances J. Colwell, M.D., Daniel C. Jepsen, M.D., William R. McCluskey, M.D., Murdock E. McIntyre, M.D., P. H. Pierson, M.D.
The purposes of the Student Health Center are to assure students of the University of Oregon a healthy environment in which to live and work, to safeguard the general health of students, and to teach the value of preventive and curative medicine through health education and individual, informal, health counseling.

The student health services in the institutions in the Oregon State System of Higher Education are supported by a student health fee and such charges as are necessary. Only students registered for the curent term are entitled to the services of the Student Health Center. All students must complete the required health-history form.
In general, medical services offered include: (1) general medical attention and treatment, including clinical gynecology, family planning and counseling, and minor surgery (major surgery and other procedures requiring general anesthesia, intensive medical care, and specialists' services are referred) ; (2) fifteen-day infirmary care in the Student Health Center facility during one academic year if recommended by a Health Center physician; (3) twenty-four-hour limited emergency service during regular school terms (major emergencies are referred to the general hospital located near the campus) ; (4) routine laboratory procedures, and X-rays; (5) a licensed pharmacy; (6) psychiatric and counseling services by a psychiatrist; (7) limited physical therapy.
Visits to the Student Health Center are by appointment, except for emergencies. An appointment may be made by telephone or by a visit to the Student Health Center during clinic hours, 8:00 a.m. to 4:30 p.m. Appointments are not necessary for the Saturday morning clinic from 8:00 a.m. to 11:30 a.m.

Charges are made for prescriptions, X-ray, laboratory procedures, and services such as immunizations and physical therapy, but every attempt is made to keep these as low as possible.

All expenses of, or connected with, surgical operations or specialized services must be borne by the student. This includes the services of a special nurse, where deemed necessary, and medical or surgical specialists who see patients in consultation in the Student Health Center or elsewhere. Under no circumstances will the Student Health Center pay or be responsible for bills from private physicians or private hospitals. It is recommended that all students who are not covered by sickness and accident insurance buy the Sickness and Accident Insurance Policy that is tailored to meet the specific needs of college students and may be purchased through the Associated Students of the University of Oregon. Student insurance does not entitle a person not registered for the current term to Student Health Center services but does apply to general medical care elsewhere as indicated in the policy. Parents are reminded that in family medical and hospital insurance policies, coverage may cease for their children when they reach the age of nineteen years.

The services of the Student Health Center are not available to members of the faculty.

Each entering student must complete a medical history form. Students are strongly urged to have a tuberculin skin test for their own protection if they have not had the test within the past year. The tuberculin skin test is available at the Student Health Center upon request.

Students with a positive reaction to the tuberculin skin test should have a $14 \times 17$ chest $x$-ray within six months of admission to the University.

It is recommended that students have had diphtheria-tetanus boosters within the last ten years. Polio and measles immunizations are also strongly recommended.

## Erb Memorial Union

Adell McMillan, M.S., Director. Frank Geltner, M.A., University Program Consultant.
Gary Grimm, M.A., Outdoor Program Coordinator.
Sandra Vaughn, M.S., Recreation Coordinator.
Tom Urban, M.F.A., Craft Center Coordinator.
Wanda Venturacci, B.S., Child Care and Development Center Director. Rachelle Katz, EMU Day Care Center Director.

The Erb Memorial Cnion (EMU) is a combination of facilities, services, and programs dedicated to making the extracurricular life of students an integral part of their edtucation. The EMU provides group meeting rooms, a variety of food service units, an art gallery, lounges, a recreation center, and a staff of program constultants to help groups and individuals in planning programs. Student government and activities offices are located on the ground floor of the EMU. Also housed in the building are a branch of the U.S. Post Office, the EMU Print Shop, an information center, a small store, a ticket outlet, the University lost-and-found, and the Oregon Wilderness Supplies store. Also a part of the EMU, but not housed in the building, is the Canoe Shack providing canoe rental for use on the Millrace and elsewhere.

The Erb Memorial Union is funded from two sources, the Incidental Fee paid by all sttodents each term, and from income generated by some of its units. Each year the EMU submits its budget to the ASUO Incidental Fee Committee, who make recommendations to the President of the University regarding the allocation of the Incidental Fee to the Athletic Department, the ASUO, and the Erb Memorial Union.

Board of Directors: The Board has the responsibility for making general policy decisions and long-range plans for the Erb Memorial Union. The Board also advises the staff of the EMU on matters of the day-to-day management and administration. Membership on the Board is made up of elected stuclents, appointed students, and appointed faculty. Three subcommittees work with Food Service, House, and Budget.

In addition to providing services and facilities, the EMU also provides activities and programs for the educational, cultural, and recreational enrichment of the University community. These EMU programs are:

Cultural Forum: The Cultural Forum presents a program of campuswide entertainment and cultural activities, including films, concerts, art exhibitions, lectures, symposiums, and other cultural events.

Outdoor Program: The Outdoor Program offers students an opportunity to participate in many outdoor activities, including camping, hiking, mountaineering, ski-touring, canoeing, kayaking, and bicycle-touring.

Craft Center: Open to all members of the University community, the Craft Center provides the opportunity for
informal work in ceramics, jewelry, woodworking, graphics, photography, and various other crafts.

Child Care Centers: Two child-care centers are available for use by Cniversity students, staff, and faculty.

Club Sports and Recreation Center: Participation by all interested students is the emphasis of the Club Sports Program, a special intercollegiate program with teams in soccer, rugby, lacrosse, judo, weight-lifting, karate, fencing, water polo, table tennis. volleyball, ski, crew, badminton, sailing, handball, bicycling, racquetball, bowling, and an equestrian team. The Recreation Center sponsors tournaments in billiards, table tennis, shuffle-board, chess, and bridge.

## University of Oregon Bookstore

James Willians, Manager. Otto Menrickson, Textbook Manager.
Thom Chambliss, Tradebook Manager. Judi Johnson. Office Manager. Bob Spencer, Supply Manager. Marj Jones, Receiving Manager.
Services: The University of Oregon Bookstore, Inc., located at 13 th Avenue and Kincaid Street, has been serving the needs of students and faculty since 1920. The Bookstore supplies the majority of texts for University classes and has a wide variety of tradebooks and current best-sellers. It supplies a good selection of school supplies, including such necessities as typewriters, electronic calctulators and a myriad of dry-goods, including toiletries and personal care goods, and such souvenir itenns as University of Oregon mementos and tee-shirts. Candy, cigarettes, and magazines of all types stupplement the inventory. There is a check-cashing service for students and faculty.

Organization and Management: For many years a cooperative store, the Bookstore is now an independent, nonprofit corporation composed of all the students, faculty, and classified staff of the University. Policy decisions are made by a Board of Directors of eight students and two faculty members.
The directors are elected by the Bookstore's membership in annual elections. The operation of the store is handled by six full-time management men and women and a large staff, many of whom are spouses of students or students working part-time.

Policy: It is the sole policy of the Bookstore to supply the consumer needs
of students and faculty in the best manner possible.

Textbooks are discounted 10 percent since they are the heart of a stitclent's education, and the Bookstore wants to help keep down as much as possible the cost of higher education.

The Bookstore is constantly striving to find new ways to better serve its membership and welcomes suggestions and constructive criticism. To serve this end, a suggestion box is placed in the lobby of the store with a standing invitation for all to use it.

## Associated Students of the University of Oregon

Purpose: Student government at the University of Oregon is the Associated Students of the University of Oregon (ASUO). Administrative officers are in the Erb Memorial Union. It is a rainbow of agencies, activities, and programs designed to serve student needs and interests. The purpose of the ASUO is to give students the opportunity to plan and direct their own programs, to become involved with every aspect of University life, and to influence the decisions that affect the quality of education and student life at the University of Oregon.

The ASUO shares the University's belief in the student's werth as an individual human being, and attempts to reinforce this within all levels of the University experience. Through its various progranus, the ASUO continually provides opportunities for students to become involved in the political realities of campus life. and encourages their co-operative participation. Structure: The ASUO is divided into executive, fiscal, and juclicial branches. The executive body is composed of a president, vice-presidents, and administrative officers. It is responsible for the ASUO budget and assists the ASUO prograns. The executive branch also recommends the appointment of student members to the many regular and ad hoc committees that serve the University and its administration.

The judicial branch of the ASUO is the constitution committee. It has the responsibility for interpreting the ASUO constitution. ASUO elections are administered by the elections board with an elections court, both functionally responsible to an ASUO vicepresident.

The Incidental Fee Committee is composed of seven students elected from the student body at large. Each year all recipients of support from inci-
dental fees (the Athletic Department, the EMU, and the ASCO, among others) submit their proposed budgets to the ASCO Incidental Fee Committee. After a series of hearings on each budget proposal, the Inciclental Fee Committee presents its recommendations to the ASUO president, who forwards the ASUO recommendation on the allocation of incidental fees to the President of the Cniversity. The final incidental-fee budget is approverl by the State Board of Higher
Education.
Student University Affairs Board: $S C A B$ is an 18 -member elected body which deals specifically with issues relating to student affairs within the University. Members are elected by students from each academic constituency for a two-year term. The SUAB is also responsible for the operation of the Information and Grievance Center in the Erl Memorial Union.

Housing Office: This service offers a free rent referral service and counsels students who are involved in landlorcltenant disputes. The office also distributes pamphlets dealing with tenant rights. finding housing in Eugene, and other housing-related issues.

Student Projects, Inc.: SPI, a student operated nonprofit corporation, inclucles two major units: Footnotes, which each term publishes class notes for large lecture courses; and the Andreason Recreation and Services for the Elderly Program, in which students provide recreation and service programs for older people in the community's nursing lomes and senior activity centers.

OSPIRG: The Oregon Student Public Interest Research Group is a statewide organization of college students, funded with student fees, to investigate consumer and environmental problems.

International Education Center: The IEC was established as a campus information and coordinating agency for overseas travel, work, and study progranns. Its services have expanded to provide coordination of campus and national programs promoting international understanding.

Survival Center: The Survival Center offers a way for students and community to share information and concern about environmental issues, and provides the organization for projects directed at specific problems. An example is Project Intercept, designed to recycle paper used by all departments on the campus.
$E S C A P E$ : Student-initiated and student-run, ESCAPE is an accredited practicum which places student volun-
teers as teaching aides, tutors, and counselors in public and private local schools, day-care centers, nursing homes, and other educational agencies throughout the Eugene area.

Emerald Subscription: The ASUO purchases a subscription to the Oregon Daily Emerald, an indepenclent newspaper, for each member of the Lniversity student body.

The Oregana is the Yearbook for the University of Oregon. Produced entirely by students, the Oregana provides a pictorial record of events and is published annually. It also provides students with the opportunity to exercise journalistic skills to produce the yearbook.

Drug Information Center: The Drug Information Center provides answers to any and all questions concerning drugs and drug usage. This inclucles the physiological, psychological, and sociological aspects of prescription, over-thecounter preparations, herbals, and street clrugs. The Drug Analysis Project, provided free and anonymously, is available by calling 686-5411. The DIC also sponsors University classes on drugs.

Action Nore: A University-based lending library of tools which offers students the opportunity for on-the-job experience in construction, designing, and remodeling. The program has developed a self-sufficient-energy dwelling which is both inhabitable and open to the public as an educational resource in energy use.

University Theater: The ASUO contributes funds to the University Theater in order to reduce the costs of admissions for students.

Music: The ASUO provides some financial support for student music activities, bands, choirs, and symphony orchestra, which are administered by the School of Music.

Repertory Dancers: The Modern Repertory Company, composed of faculty and advanced modern dance stuclents, performs works choreographed by students and the director. The company performs on campus several times each year.

Recreational Folk Dancing: This program provides folk dance instruction and evening dance recreation up to three nights a week for interested members of the University community.

## SEARCH Office of Experimental

 and Innovative Education: SEARCH is the ASUO agency responsible for student initiated and frequently stu-dent-taught courses labeled experimental or innovative either because the content, or learning situation, or both, differ greatly from the regular curricu-lumm. These courses carry University academic credit.

Women's Resource and Referral Service provides services for Cuiversity and community women who require counseling and advice on matters appropriate only to women. It provides an educational resource for understanding potentialities and realities for today's women.

University Women in Transition: This organization provides assistance and support to mature women who, through life changes such as divorce, widowhood, and the need to clevelop a new self-image and identity, are returning to the University to further their education. A council of nine elected women administers the activities of the organization. Suite 1, EMU, telephone 686-3013.

Forensics: Forensics is the University's debating society, funded by the ASUO and advised by faculty and staff from the Department of Speech.

Crisis Center: An ASUO-funded program available all hours of the day and night to students and community people in need of crisis-intervention counseling. This unique program offers help to those who are depressed, freaked-out, or unable to cope.

Associated Oregon Student Lobby is a federation of student governments devoted to the interests of students in Oregon institutions of Higher Education. Member organizations are Oregon, Oregon State University, Portland State University, Southern Oregon State College, Oregon Institute of Technology, Oregon College of Education, and Eastern Oregon State College. Main Office of the AOSL is in Salem.

Legal Services: The ASUO Legal Services Office, staffed by two lawyers and several secretaries, provides legal services for all students who have paid their incidental fees, excluding litigation and some exceptions such as the preparation of tax returns and wills. The office also provides legal advice to the ASUO executive and ASUO programs.

National Student Lobby: The National Student Lobby is a federation of state organizations, student governments, and indlividuals devoted to the interests of the recently enfranchised millions of college and secondary school students throughout the United States. As a registered lobby with the U.S. Congress, the NSL maintains close contact with state student lobbies (legislative coordinators) and other statewide student associations, providing mutual support in their respective endeavors. The ASUO encourages University students to participate in the NSL.

Alert: Alert is an organization whose purpose is to represent the needs of the handicapped student to the University, and to help orient handicapped students to the campus community.

Asian American Student Union: The Asian American Student Union (AASU) exists to serve the needs of the University's considerable population of Oriental-Americans. This Union exists so that Asian-Americans might define and articulate an authentic identity on their own terms.

Black Student Union: The Black Student Union is the focus of social and cultural activities, the agent for developing community unity and black consciousness, and the center for promoting interest and involvement in University affairs arnong black students.

Chinese Student Association: The Chinese Student Association represents about 300 Chinese students on campus. The CSA's major goals are to coordinate academic, social, and cultural activities within the Association, and to present them to the University community.

Foreign Student Organization: The Foreign Student Organization (FSO) represents the University's foreign students before the State Board of Higher Education, the Legislature, the University administration, and the
student body in matters that directly affect foreign students.

Gay People's Alliance: The Gay People's Alliance serves those gay students who seek a relaxed, nonoppressive atmosphere for significant social interaction and worthwhile activities with other gay students, and who seek to affirm a positive sense of self.

## Gerontology Association: An

 ASUO-funded program which offers students the opportunity to work in close association with elderly people in the community to provide such services as transportation to the polls, social activities, and the publication of a popular newsletter, The SAGE.$M E C h A$ : This organization represents the Chicano students at the University. MEChA stands for Movimiento Estudiantil Chicanos de Aztlan, or Student Movement of Chicanos of Aztlan. It coordinates Chicano student activities and represents the interests of Chicano students at the University.

## Native American Student Union:

 The Native American Student Union (NASU) is primarily concerned with orienting native Americans to campus life through cultural, recreational, and social events ; and in educating the community to native American life styles, both historic and contemporary.Prehealth Sciences Center: Annual programs of PHSC include a seminar on medical issues, professional-school information, and clinical observation for premedical and predental students. The PHSC newsletter is a source of information for these programs and for some aspects of health care.

Student Bar Association: The Student Bar Association (SBA) functions as the umbrella agency for student interest groups within the University of Oregon School of Law.

3-D Progrann: Brings children of different ethnic backgrounds together to participate in cultural, recreational, and educational activities. The goal of the program is to perpetuate cultural awareness and social interaction between the children and their parents.

Food-Op, Inc.: a student-run nonprofit organization which provides food to students and to student households at reduced prices. The General Store is at 15 th Avenue and Agate Street. For a nominal fee, students may become Food-Op members. The Food-Op also provides service to off-campus living organizations.

ASUO Neres Bureau serves the ASUO programs and governance bodies by acting as liaison between the ASUO and the mass media to publicize campus issues, events, and activities.



## University Graduate Study

## Graduate School

Aaron Novick, Ph.D., Dean. Professor of Biology. B.S., 1940, Ph.D., 1943. Chicago.
Warren B. Brown, Ph.D., Associate Dean. Professor of Management. B.S., Colorado, 1955 ; M.S., Stanford, 1957 ; M.S., 1959, Ph.D., Carnegie Mellon University, 1962.
Frederick S. Wilhelm, M.S., Assistant to the Dean. B.S.. 1954, M.S., 1970, Oregon.
Donald W. Poz'ell, Assistant to the Dean. B.A., 1967, M.S., 1975, Oregon.
Joanne Carlson, B.A., Assistant Dean
for Program Development. B.A., 1950, Oregon.

## Graduate Council

Dean Aaron Novick, Chairman ex officio; Peter Bergquist, Jan Broekhoff, Carolin Keutzer, Jack Maddex, Stoddard Malarkey, Joel McClure, Clarence Schminke.

Statements in this section are announcements of present policies only and are subject to change.

The graduate curriculum at the Lniversity of Oregon allows considerable flexibility. All study beyond the baccalaureate degree, except for professional study in law, medicine, and dentistry. is administered through the Graduate School. The formulation of graduate programs is the responsibility of the instructional department, subject, however, to the general rules and requirements of the Graduate School. Individual graduate student prograns are developed in consultation with advisers, subject to departmental and Graduate School requirements.

For cletails of graduate study in any given discipline, please refer to the section entitled "Graduate Studies" in the appropriate department of instruction within a school or college.

## Advanced Degrees

Through the Graduate School, the University of Oregon offers studies leading to advanced degrees in the liberal arts and sciences, and in the professional fields of architecture and allied arts, business administration, education, health, physical education, and recreation, journalism, and music. The advanced degrees granted are listed below with the departments offering programs of study leading to these degrees.

The requirements for the majority of these degrees appear in the departmental sections of this catalog. General requirements appear in the following pages.

## College of Arts and Sciences

Anthropology : M.A., M.S., Ph.D.; Biology : M.A., M.S., Ph.D.; Chemistry: M.A., M.S., Ph.D.; Classics: M.A.; Comparative Literature: M.A., Ph.D.; Computer Science: M.A., M.S., Economics : M.A., M.S., Ph.D. ; English : M.A., M.F.A., D.A., Ph.D.; Geography : M.A., M.S., Ph.D.; Geology : M.A., M.S., Ph.D. ; Germanic Languages: M.A., Ph.D.; History : M.A., Ph.D. ; Mathematics: M.A., M.S., Ph.D.; Philosophy : M.A., Ph.D.; Physics: M.A., M.S., Ph.D.; Political Science: M.A., M.S., Ph.D.;

Psychology: M.A., M.S., Ph.D.; Romance Languages: M.A., Ph.D.; Russian: M.A.; Sociology : M.A., M.S., Ph.D. : Speech : M.A.. M.S.. M.F.A., Pl.D.

School of Architecture and Allied Arts Architecture: M.Arch. ; Art Education: M.A., M.S. : Art History : M.A., Ph.D. : Fine and Applied Arts : M.A., M.S., M.F.A. : Landscape Architecture : M.L.A. ; Urban and Regional Planning: M.U.P.

## College of Busincss Administration

 Accounting and Quantitative Methods: M.A., M.S., M.B.A., Ph.D. ; Finance: M.A., M.S., M.B.A., Ph.D. ; Marketing, Transportation, and Business Environment: M.A., M.S., M.B.A., Ph.D.: Management: M.A., M.S.. M.B.A., Ph.D.
## College of Education

Counseling : M.A., M.S., M.Ed., D.Ed., Ph.D. ; Curriculum and Instruction: M.A., M.S., M.Ed., D.Ed., Plı.D.; Educational Administration: D.Ed., Ph.D.; Educational Policy: D.Ed., Ph.D.; Educational Psychology: M.A., M.S., M.Ed.. D.Ed., Ph.D. ; Higher Education: D.Ed., Ph.D.; Special Education : M.A., M.S., M.Ed., D.Ed., Ph.D.; Speech Pathology-Aucliology: M.A., M.S., M.Ed., Ph.D.

School of Community Service and Public Affairs
International Studies: M.A., M.S.; Public Affairs: M.A., M.S.
College of Health, Physical Eduration, and Recreation
Health Education : M.A., M.S., D.Ed., Ph.D.; Physical Education: M.A., M.S., D.Ed., Ph.D.; Recreation and Park Managenent: M.A., M.S., D.Ed., Ph.D.; Dance: M.A., M.S.
School of Journalism
Journalism: M.A., M.S.
School of Music
Music : M.A., M.Mus., D.M.A.

## Interdisciplinary Studies

Asian Studies: M.A., M.S.; Industrial arid Labor Relations: M.A., M.S.; Juvenile Corrections: M.A., M.S.; Linguistics: M.A., M.S.; Teaching: M.A., M.S. ; Individualized Program : M.A., M.S.

## General Regrulations

Students wanting to earn a graduate degree at the University must be admitted to the Graduate School in accordance with the procedures described below.

Admission to the Graduate School. To be admitted to the Graduate School for the purpose of seeking an advanced degree, a student must be a graduate of an accredited four-year college or university and must also be accepted by the professional school or major department in which he or she proposes to study. (Students from unaceredited institutions or from those which offer the equivalent of baccalaureate instruction but not the degree itself may be admitted under special procedures if they are accepted by a school or department.) This acceptance is subject to the approval of the Dean of the Graduate School. The schools and departments of the University determine their own specific requirements for graduate admission, with which the student should become familiar before applying. Initial admission may be either conditional or full. If a student who has been conditionally admitted has not been granted full admission after the completion of 36 credit hours of graduate course work, the Graduate School will inquire of his or her school or department as to the reason and recommend that a decision on the student's status be made as soon as possible.

Former University of Oregon students must be formally admitted to the Graduate School in the same way as stuclents from other colleges and universities. Students who have been formally admitted to the Graduate School and who want to change their major must be accepted by the new department, which is accomplished by filing a "Change of Major" form and any official documents the department may require.

Students not previously enrolled at the University of Oregon are required to pay a $\$ 10.00$ admission application fee at the time of applying for admission.

Applicants should address inquiries concerning graduate admission to the department or school in which they plan to study, not to the Graduate School or the Office of Admissions.

Documents Supporting Application. An applicant for admission to the Graduate School must submit an application on an official University form, transcripts of all previous college work, and any additional information as required by
the Graduate School. The first copy of this form and an official transcript from the college or miversity from which he or she received a baccalaureate clegree and all stubsequent post-baccalaureate clegree work must be sent to the Office of Admissions, University of Oregon, Eugene, Oregon 97403. (Lniversity of Oregon gradıates must provide the Admissions Office with an official transcript of all post-baccalaureate degree work taken at all other institutions.) The remaining copies of the form, and an official transcript of all previous college work, both undergraduate and gradluate, must be sent to the department or professional school of the University in which the student wants to study. At the option of the school or department, the stuclent may also be required to furnish such additional material as transcripts of test scores (Graduate Record Examination, Miller Analogies, etc.), evidence of foreign language proficiency, and letters of reference. The applicant should ascertain from the school or department what additional material, if any, is expected.

## Admission to the University for Post-

 Baccalaureate Study. Applicants with a baccalaureate degree or the equivalent from an accredited institution who want either (1) to take additional undergraduate or graduate work for professional or ctiltural reasons, or (2) to earn another undergraduate degree without entering a graduate degree or certification program, must submit the official application form and an official transcript from the college or university from which he or she received either the baccalaureate degree or a subsequent advanced degree to the Office of Admissions, University of Oregon, Eugene, Oregon, 97403. (University of Oregon graduates-disregard the sending of an official transcript to the Office of Admissions.) Admission to post-baccalaureate status is a nondegree classification and is granted only for one academic year. A satisfactory record is a factor in determining re-enrollment privileges. Credits earned by postbaccalaureate students are recorded in the Registrar's Office. Refer to the subsequent section entitled On-Campus Nondegree Graduate Classifications for additional information.Continuous Enrollment. Students who have been admitted to the Graduate School to work toward an advanced degree or to pursue a specific program of graduate course work with a nondegree objective (certificate, credential) must enroll continuously in the University from the time they first
register until they have completed all requirements for a degree or other program. (Registration in extension courses taken through the Division of Continuing Education cloes not satisfy the continntous entolllment requirement.)

In any term in which students are making use of Cniversity services or facilities, they must enroll for a minimum of 3 credit hours of graduate course work and pay the appropriate fees. Ordinarily students are expected to take this work in residence, but they may register by proxy for approved course work to be taken in absentia, when, for example, they are living elsewhere while writing a thesis or dissertation and sending chapters of it to an adviser for criticism. (Proxy registration will be permitted only cluring the normal registration period for the term in question and must be completed by the date indicated in the Time Schedule of Classes as the last day to register for that term.)

If students interrupt their program of graduate study for one or more terms (exclucling summer term), they must register for on-leave status to insure that a place will be kept open for them by the Graduate School and their school or department until they return. When students register for on-leave status, they are not required to pay fees, nor are they permitted to place any demands on University staff or facilities. If a student fails to register for on-leave status, it will be assumed that he or she has decided to discontinue the graduate program, and Graduate School standing will be cancelled. In this event, if they should later want to return, they must apply for permission to re-register in the Graduate School. On-leave status is granted for a stated period of time, but may not exceed one calendar year. If the student's request for on-leave status is denied, he or she must file a Permission to Re-register form for the term planned for return. Students who are able to pursue their master-degree work only in the summer term must apply for leave status for each ensuing school year ; they may request extensions of leave up to but not beyond the seven-year limitation on credit earned toward a master's degree. An application for on-leave status, endorsed by the major department or professional school, must be received by the Graduate School not later than the last day to register for classes in that term as stated in the Time Schedule of Classes.

Students may not apply for on-leave status unless they are graduate students in good standing in the school or department to which they have been
admitted. Leave status is not applicable to post-baccalaureate students.
Reservation of Graduate Credit. Superior students who have taken graduate seminars and courses at the University of Oregon during their senior year in excess of all baccalaureate-degree requirements may petition to apply the credit earned toward a master's degree. Such graduate credit may be earned for graded courses in which either an A or B was recorded, or for nongraded courses for which the student presents the instructor's evaluation stating that the work was of graduate quality, and has the approval of the major department. A Transfer of Baccalaureate Credit form, available in the office of the Graduate School, must be filed not later than two terms after matriculation to a master's-degree program at the University of Oregon, and not later than two years after receipt of the baccalaureate degree. Such transfer of credit is limited to a maximum of 9 credit hours, and is limited to courses and seminars carrying graduate credit. Credit hours in research, thesis, reading and conference, practicums, and workshops do not qualify for transfer.
Graded credit hours accepted for transfer under this provision will count in meeting all relevant University master's degree requirements.
Course Registration Requirements. All graduate students using campus facilities or studying under the supervision of a nember of the faculty are required to register for a minimum of 3 credit hours of graduate course work per term. This rule applies also to students taking comprehensive or final examinations, or presenting recitals or terminal projects for advanced degrees. If all degree requirements, including examinations and completion of thesis, have been completed in the term before that in which the degree is to be awarded, the student need only register for on-leave status. Final copies of the thesis must be filed at the Graduate School three working days before registration for the next term or the student will be required to register for the minimum 3 hours.

Students working for a 45 -hour master's degree with thesis are required to register for a minimum of 36 credit hours of course work and 9 credit hours of Thesis (503) before completing the program for the degree. Students working for a Ph .D. or for a professional doctorate are required to register for a minimum of 18 credit hours in Thesis before completing the program for the degree. With school or department approval, up to 3 of the 9 hours of
thesis required for the master's degree, and up to 6 of the 18 required for the doctorate may be in Research (501) instead. Credit for Thesis (503) and Research (501) is granted on a pass/ no-pass basis.

Graduate students holding teaching or research appointments must register for graduate courses, or undergraduate courses, if they are prerequisites. The registration may be in formal graduate courses or for research or thesis credits applicable towards an advanced degree. If the students hold .50 teaching or research appointments, they are required to enroll for a minimum of 6 credit hours of graduate course work. If they have a .30 or .15 FTE, they must enroll for a minimun of 9 graduate credit hours. The Social Security contribution will be withheld for graduate appointees registered for less than 9 credit hours per term.

A student holding a . 50 graduate teaching or research appointment may register for a maximum of 10 graduate credit hours in any one term of the academic year; a student holding a . 30 appointment may register for a maximum of 12 graduate hours and a student holding a .15 appointment may register for a maximum of 15 graduate hours.

For students who do not hold a graduate teaching or research appointment, the maximum full-time course load for a graduate student is 16 credit hours. Students wanting to register in excess of this level must obtain permission from the appropriate school, college, or department and must pay additional fees for each credit hour in excess of the 16 . Included in the 16 -hour total are credits earned in pre-session and post-session workshops, seminars, and other credit-yielding activities commonly associated with the summer session.
(Faculty and staff members wanting to take graduate courses should refer to the University's Administrative Manual for information about maximum hours and permission to enroll. Persons holding faculty rank may not pursue studies toward an advanced degree in the same department in which they are employed; faculty members must petition the Dean of the Graduate School within the first term after admission for permission to seek an advanced degree in a school or department other than the one in which they are currently employed.)

Graduate students and advisers are reminded that various agencies and offices, both on and off campus, have their own course-load requirements. For example, a graduate student who has a loan must register for the number
of hours needed to meet the loan agency requirements. The Registrar's Office cannot certify a student for registration except for the hours indicated on an official registration card. The minimum registration requirements of the Graduate School do not affect a student's responsibility to register for the number of hours required by the outside supporting agency.
Grade Requirement. To qualify for an advanced degree a graduate student is required to earn at least a B grade average in all graduate courses taken in a degree program at the University of Oregon. Of the 45 credit hours the Graduate School requires for a master's degree, at least 24 must be University of Oregon graded graduate courses. A grade-point average of less than 3.00 at any time during a graduate student's studies, or the accumntation of more than five hours of N or F grades, regardless of the grade point average, is considered unsatisfactory, and may result in clisqualification by the Dean of the Graduate School after consultation with the student's major clepartment or school. Disqualification means that a student's degree program is terminated by the student being dropped from the Graduate School and from further work in an advanced degree program in that department or school.

Grades of D or F for graduate courses will not be accepted for graduate credit but they will be computed in the GPA. Graduate credit is not granted for a course in which the student earns a grade of N nor is it computed in the GPA.
Graduate Courses. All courses numbered in the 500 s carry graduate credit. as do those in the 400 s which have been approved by the Graduate Council.
Approved courses in the 400s are designated in this catalog by ( $G$ ) or ( g ) following the course title (and in the Time Schedule of Classes by G or M). Courses designated (G) may form a part of either a major or a minor; courses designated (g) may be taken toward a minor or for a nonmajor, or, in approved circumstances, as part of an interdisciplinary master's program. Undergraduate enrollment in the 400 courses designated ( $G$ ) is generally restricted to seniors; undergraduate enrollment in 400 courses designated $(g)$ is generally restricted to juniors and seniors.

Courses numbered in the 500 s and designated ( p ) represent instruction offered at a level of intellectual maturity suitable for graduate students who have earned a baccalaureate degree in a field other than their professional field. Such
courses carry credit toward a master's degree, but this credit may not be counted toward the minimum requirement of 30 credit hours in the major.
On-Campus Nondegree Graduate Classifications. In addition to the classifications for graduate students in master's and doctoral degree programs, there are classifications for students who are not seeking graduate degrees. These classifications include postbaccalaureate, nonmatriculant, and summer-session transient. Graduate credits earned by students in these nondegree classifications are recorded on a student's transcript. If such a student is subsequently admitted to a graduate-degree program, up to a maximum of fifteen graduate credits taken on the University of Oregon campus from any combination of the nondegree program classifications or on-campus DCE registration may be counted in a master's program if approved by petition. Such a petition must be endorsed by the department or school and approved by the Graduate School. Approved courses may be used in meeting all relevant University clegree requirements.

Removal of Incompletes. In order to obtain credit for a graduate course which was marked incomplete, a graduate student must convert the incomplete into a passing grade by the last day of the next term in residence or within one calendar year of the assignment of the mark of I, whichever occurs first. Incompletes not converted in accordance with the above schedule will not be counted in meeting advanced degree requirements without approval by the Dean of the Graduate School of a petition from the student, signed by the instructor extending the term for removal of the incomplete. The petition must state the minor, yet essential, requirements of the course which were not initially completed. This restriction does not apply to incompletes assigned to Research (501), Thesis (503), and Terminal Project (509). This policy became effective with grades reportable for winter term 1975.

Off-Campus Graduate Courses. Graduate students at the University of Oregon may, with the consent of their adviser, take courses carrying graduate credit at any of the other institutions in the Oregon State System of Higher Education. Students register for these courses with the University of Oregon Registrar. Grades are transmitted by the instructor to the University Registrar and recorded on the student's University of Oregon transcript.

Graduate Credit by Examination. A currently enrolled graduate student may petition the Dean of the Graduate School for permission to receive graduate credit by examination in areas for which he or she has qualified by experience or independent study, provided these areas are directly equivalent to graduate courses listed by title in the current Catalog of the University of Oregon. The rules governing such credit by examination are as follows:
(1) The student's petition must be approved by a graduate adviser and the dean or department head of the division offering the course.
(2) Arrangements for the examination must be completed at least one month before the date of the examination.
(3) The student must pay in advance a special examination fee of $\$ 15.00$ per course.
(4) Graduate credit by examination is recorded with a mark of "pass" (P) unless the course in question is listed in the most recent Time Schedule as graded only. The courses may not count toward the satisfaction of the residence requirement for the master's degree.
(5) Credit by examination is not awarded for the following courses: Research, Thesis, Reading and Conference, Workshops, and Practicum (401-410 and 501-510).
(6) Students may not receive graduate credit by examination in courses (a) in which they have previously enrolled and failed at the University of Oregon or elsewhere; or (b) which would substantially duplicate credit already received and which is being applied toward an advanced degree at the University of Oregon.
Tuition, Fees, and Deposits. Regular tuition and fees for resident graduate students enrolled for a total of 9 to 16 credit hours of work are currently $\$ 402.00$ a term or $\$ 1206.00$ for the three-term academic year. A surcharge of $\$ 37.00$ per credit hour is made for all hours in excess of 16 . Nonresident graduate students enrolled for a total of 9 to 16 credit hours of work currently pay $\$ 510.00$ a term or $\$ 1530.00$ for the three-term academic year. A surcharge of $\$ 49.00$ per credit hour is made for all hours in excess of 16 . Students holding graduate teaching or research appointments pay reduced tuition and fees, currently $\$ 69.50$ a term or $\$ 202.00$ for the three-term academic year.

Tuition for less than a full-time program is as follows:

| Credit <br> hours | Resident | Non- <br> resident |
| :---: | :---: | ---: |
| 3 | $\$ 158.00$ | $\$ 194.00$ |
| 4 | 195.00 | 243.00 |
| 5 | 232.00 | 292.00 |
| 6 | 269.00 | 341.00 |
| 7 | 316.00 | 400.00 |
| 8 | 359.00 | 455.00 |

All fees are subject to change by the State Board of Higher Education.

Graduate students must make a $\$ 25.00$ general deposit once each year at the time of first registration as a protection to the University against loss of or damage to instituitonal property.

A new graduate student, who has not been previously enrolled at the
University of Oregon, pays a $\$ 10.00$ application fee ; this fee, which is not refundable, must be sent to the Office of Admissions with the student's application for admission.

All doctoral students and master's degree candidates who write a thesis are assessed a microfilming fee to cover the cost of reproduction.

All doctoral students are required to submit their dissertation to Xerox University Microfilm in Ann Arbor, Michigan. Current fees for this service are:
Full Publishing Service
(required) $\$ 25.00$
Microform (required) -............ 6.00
Copyright Service (optional) .. 20.00
If the thesis committee for a master's candidate recommends that the thesis abstract be published in Master's Abstracts and publication through
Xerox University Microfilm, the current fees are:
Full Publishing Service
(required) $\$ 20.00$
Microform (required)
Copyright Service (optional) .- 20.00
All master's candidates who write a thesis are required to have a microfilm copy of the thesis on file in the University Archives. The Library provides the microfilming service for a fee of $\$ 4.00$ from the student. This is an economic savings to the student since it reduces the number of printed copies required. If a master's thesis is submitted to Xerox University Microfilm, the $\$ 4.00$ fee is not assessed.

Degree Requirements for Master of Arts, Master of Science
Credit Requirements. For a master's degree, the student must complete an integrated program of study totaling not less than 45 credit hours in courses approved for graduate credit of which at least 24 must be University of Oregon graded graduate courses.

Integration may be achieved either through a departmental major or through a program of interdisciplinary studies. For the master's degree with a departmental major, a minimum of two-thirds of the work ( 30 credit hours) ordinarily must be in the major. A student earning the first master's degree from the University of Oregon may receive the second master's degree in a different field by taking not less than 30 graduate credits in the new major at the University of Oregon, of which 24 mutst be in University graded graduate courses. Schools and departments may require more than this minimunn in individual cases. If the first master's degree is from another institution, the second master's must comply with the normal University master's-degree requirements. Graduate courses graded P may be counted in the 45 credit hours required for a master's degree (or in the 30 for a second master's), but may not be counted in the required 24 credit hours of University graded graduate course.

Residence Requirement. The minimum residence requirement for the master's degree is thirty graduate credit hours which are taken on the Eugene campus and which are included in the degree requirements. These thirty credit hours must extend over a minimum of two terms of work on the Eugene campus. The residence requirement for the M.F.A. degree in studio arts is two academic years (six terms). Individual schools or departments may increase the minimum residence requirement. The residence requirement for a second master's degree from the University of Oregon is a minimum of two terms of full-time study on the Eugene campus.

Transferred Credit. Graduate credit earned while a graduate student in another accredited Graduate School, or through the Division of Continuing Education of the Oregon State System of Higher Education, may be counted toward the master's degree under the following conditions: (1) the total of transferred credit may not exceed 15 credit hours in a 45 -hour master-degree program; (2) the courses must be relevant to the degree program as a whole; (3) the transfer must be approved by the student's major department and the Graduate School; (4) the grades earned must be $\mathrm{A}, \mathrm{B}$, or P; (5) transferred credit may not be used to meet the requirement of 24 hours of credit in University graded graduate courses. Graduate credit is not allowed for correspondence courses. Credit granted for work done at another
institution is tentative until validated by work in residence.
Distinction Between the M.A. and M.S. Degrees. For the M.A. degree, the student must show a competence in one foreign language ; the level of proficiency and the method of determining that level are decided by the major school or department. There is no language requirement for the M.S. and professional degrees unless specified by the school or department.
Course Requirements. For the M.A. or M.S. degree with a departmental major, at least 9 credit hours in 500-599 courses taken on the University of Oregon campus are required; for the interdisciplinary master's degree, at least 9 credit hours in 500-599 courses are also required.
Time Limit. All work for a master's degree must be completed within a period of seven years. This includes work for which credit is transferred from another institution, thesis, and the final examination.
Examinations. Qualifying and final examinations may be required in any field at the discretion of the department or school. The conduct and content of these examinations are departmental or school responsibilities.
Thesis. In some fields, all candidates for the master's degree are required to present a thesis; in others the thesis is optional or not required.

A student who writes a thesis should request from the major school or department information on the various steps involved and the standards expected. The student should also obtain from Graduate School a current copy of the Style Manual for Theses and Dissertations, which sets forth the requirements governing format, abstracts, and other regulations. The candidate should inquire as to the specific number of copies of the thesis to turn in, and also submit three copies of an abstract ( 150 words maximum). All master's theses will be microfilmed for which there is a fee that is assessed at the time the thesis is submitted to the Graduate School (see page 28). Copies of theses will not be accepted by the Graduate School unless they meet the standards of form and style specified in the Style Manual.

## Interdisciplinary Masters' Programs

In addition to specialized graduate work in the traditional fields of learning, the University provides opportunities
for integrated interdisciplinary studies leading to the M.A. or M.S. degreeincluding both programs planned in the light of the individual student's interests and established programs of studies organized and administered through interdepartmental faculty committees.

Graduate students pursuing a program of interdisciplinary studies may supplement graduate courses offered by the several departments and schools with individualized studies, for which they may enroll under the following course numbers:
ISt 501. Research. Credit hours to be arranged. No-grade course.
ISt 503. Thesis. Credit hours to be arranged. No-grade course.

## ISt 505. Reading and Conference.

Credit hours to be arranged. No-grade course.

Industrial Relations
Juvenile Corrections.
ISt 506. Special Studies. Credit hours to be arranged.

Juvenile Corrections.
ISt 507. Seminar. Credit hours to be arranged. No-grade course.

Industrial Relations
Juvenile Corrections.
Asian Studies. Grade required for majors.

The established interdisciplinary programs approved by the Graduate Council are listed below. A student interested in one of these programs should send an inquiry to the program director:

Asian Studies, Yoko McClain; Juvenile Corrections, Kenneth Polk; Industrial and Labor Relations, Eaton H. Conant.

The requirements for an M.S. degree in interdisciplinary studies are the same as those for the departmental master's degree, except those requirements relating to major or minor fields. For the M.A. degree, the student must show, either by examination (GSFLT minimum score 440 ) or by adequate undergraduate courses (satisfactory completion of the second-year college course), a reading knowledge of a foreign language.
Interdisciplinary Studies: Individualized Program. The Individualized Program is the University's most flexible interdisciplinary program leading to a master's degree.

The program is intended to meet the needs of students with particular, well-articulated goals that cannot be reached through established departmental programs, and admission is
highly selective. Although considerable flexibility is allowed in the design of a program to meet a student's individual needs, it must be composed of existing courses from approved master's degree programs in three separate professional schools or departments in the College of Arts and Sciences. Success depends heavily upon the individual initiative and self-reliance of each student.

The applicant is considered for acceptance into the program in part on background qualifications, in part on the statement of purpose, and in part by the appropriateness and availability of courses and advisers within the University. Applicants who previously have been denied admission to a departmental graduate program at the University are generally not considered for admission into an IS :IP program which includes that department in the progran.

The IS:IP program must culminate in a master's thesis, or an integrated terminal project. This is determined preferably at the beginning of the course of study by the student and three advisers. The program must, understandably, meet the University of Oregon Graduate School's minimum requirements for a master's degree which are given in detail in this catalog. Both the Master of Science and the Master of Arts degrees are available for this program.

Inquiries about the Individualized Program should be addressed to the Director, Interdisciplinary Individualized Progran, Graduate School, University of Oregon, Eugene, Oregon 97403.

Interdisciplinary Master's Program for Secondary Teachers. An interdisciplinary master's clegree program for secondary teachers who are also working toward the satisfaction of the Oregon state requirement of a fifth year of college work for the standard seconclary teaching certificate is offered as one of the University's programs of interdisciplinary studies. Students must have a reasonable background of undergraduate study in education and in the field in which they propose to work, as evidenced by holding a basic certificate of secondary teaching.

Certification requirements for the institutional recommendation for the standard certificate are separate from the University of Oregon master's degree requirements. However, some courses taken in a master's degree program may be applied in meeting certification requirements. Depending upon individual student background, additional courses at either graduate or
undergraduate levels or both may be required for certification. Inquiries regarding certification requirements should be directed to the Office of Teacher Certification in the College of Education. All students admitted to this program should file their planned program to meet certification requirements with the Office of Teacher Certification in the College of Education.
The program requirements for an interdisciplinary master's degree for secondary teachers are as follows: A total of between 45 and 51 credit hours in gracluate courses, distributed in accord with (a) and (b) below.
(a) A total of 36 credit hours in subject fields (work in liberal arts departments or professional schools), distributed in accordance with one of the following options:
(Option 1) A minimum of 36 credit hours in a subject matter field in which secondary certificates are issued.
(Option 2) Between 15 and 21 credit hours in each of two subject matter fields in which secondary certificates are issued.
(Option 3) A minimum of 36 credit hours in the composite field of social studies or the composite field of science. A program in social studies must include work in at least three of the following fields: anthropology, economics, geography, history, political science, psychology, and sociology. A progran in science must include work in at least three of the following fields: biology, chemistry, geology, mathematics, and physics.
In each of the options listed above, at least 6 credit hours of work must be taken in 500 -level courses. The remaining courses may inclucle, with some restrictions, both the 400 (G) and 400 (g) series. The student's program must be planned to provide well-rounded knowledge, and must not be made up of scattered, unrelated courses. The program culminates in a comprehensive examination in the subject-matter fields or an approved terminal project.

A student electing either option 1 or option 2 must have had at least 18 credit hours of undergraduate course work in the subject field involved. A student electing option 3 must have had at least 12 credit hours of course work in each of the three subject fields involved.
(b) Between 9 and 15 credit hours in graduate education courses normally in the field of curriculum and instruction, the number of hours to be deternined on the basis of the amount
of work in education completed by the student as an undergraduate.
Inquiries about programs under option 1, above, should be directed to the chairman of the appropriate department. General inquiries about the progrann and options 2 and 3 should be addressed to the Director, Interdisciplinary Master's Teaching Program, Graduate School, University of Oregon, Eugene Oregon 97403.

## Doctor of Philosophy

The degree of Doctor of Philosophy is granted primarily for attainments and proven ability. Requirements of time and credit are secondary ; but no candidate will be recommended for the degree until the minimum requirements of residence and study have been satisfield. It is recommended that a student not take all undergraduate and all graduate work at the University of Oregon.
Residence Requirement. For the Ph.D. degree, at least three years of full-time work beyond the bachelor degree are required, of which at least one academic year (three consecutive terms of fulltime study, with a minimum of 9 completed credit hours per term) must be spent in residence on the Eugene campus. Research and thesis hours may be a part of the 9 credit hours per term, although thesis hours normally are not completed until the final document is submitted. In the event the master's degree is conferred by the University of Oregon, the three consecutive terms in continuous full-time residence must be after all requirements for all master's degrees are completed.
Language Requirement. Knowledge of a foreign language or of other specialized disciplines such as computer science or statistics is required by individual schools or departments as part of a Ph.D. program. For information on such requirements, the student should consult the school or department directly.
Advancement to Candidacy. The student working toward the Ph.D. degree must pass a group of comprehensive examinations (oral or written or both). These examinations are expected to cover major areas in the student's program of graduate study and may cover any supporting area requested by the school or department. The student will be held responsible not merely for material directly covered in the graduate courses completed, but also for additional independent study in his or her field, with the object of demonstrating
a comprehensive and integrated command of the selected discipline.

Within two weeks after the student has passed the comprehensive examinations, the major school or department will submit a report to the Dean of the Graduate School recommending advancement to candidacy.

The defense of the thesis for a doctorate (whether Ph.D. or professional) must be held not later than three calendar years after advancement to candidacy. Failure to complete requirements for the degree within this period will invalidate the student's comprehensive examinations.

Advisory Committee. The advisory committee of the candidate for the Ph.D. degree determines the amount of work the student is to do for the degree in light of academic background and objectives.

This committee is appointed by the head of the department or dean of the school in which the student is working. Its membership need not be approved by the Graduate School. The committee usually is made up of three or four members, with the student's adviser serving as chairman. It may or may not have an outside member, depending on the preference of the department or school, which also may determine the time at which the committee is to be appointed.

Thesis. Every candidate for the Ph.D. degree must submit a thesis embodying the results of research and showing evidence of originality and ability in independent investigation. The thesis must be a significant contribution to knowledge, based on the candidate's own investigations. It must show a mastery of the literature of the subject, and be written in creditable literary style. It is expected that the preparation of an acceptable thesis will require at least the greater part of an academic year.
Dissertation Committee. This commitee normally is composed of the members of the advisory committee, with the candidate's dissertation adviser, from his or her major department, serving as chairman. It will usually include at least three members from the graduate faculty of the candidate's major department or school and an additional member of the graduate faculty not affiliated with that department or school who is regarded as a representative of the Dean of the Graduate School.

The candidate's department or school proposes the membership of the committee to the Dean of the Graduate

School, who, after approving it, officially appoint the committee. There may be instances when appointment of one or more members of the graduate faculty from another University is appropriate. In appointing any additional members, the Dean may act either independently or in accordance with nominations submitted by the canddate's major department or school; such additional members may include representatives of supporting or related disciplines.

The membership of the committee should be proposed to the Dean of the Graduate School within one month after advancement to candidacy and no later than six (6) months before the date of completion. This will become effective for all those graduating Fall term 1978 and thereafter.
Defense of Thesis. A formal public defense of the thesis on the Eugene campus is obligatory. The candidate is expected to be registered for a minimum of three hours of course work for the term the student has the oral defense. During this public defense, the candidate will present the major ideas, findings, and results in the thesis, and be subject to questions by the general public and members of the dissertation committee. The defense of thesis must be scheduled by the chairman of the dissertation committee, with the cooperation of the candidate's department and the Graduate School at least three weeks prior to the date of the defense. A legible draft of the final thesis must be available for committee members at least three weeks prior to the defense of thesis.

The candidate's dissertation committee must attend the oral defense; chairman of the committee must certify to the Graduate School that the defense was made as scheduled.

## Completion of Thesis. Following the

 defense of thesis but before the thesis is submitted in duplicate to the Graduate School, each member of the dissertation committee must confirm in writing that he or she approves the final version of the thesis. In the event that the thesis fails to gain unanimous approval of the dissertation committee, it becomes the responsibility of the dean of the Graduate School, after consulation with the student, the department chairman, and the committee, to determine the review procedure.Copies of the thesis will not be accepted by the Graduate School unless they meet satisfactory standards of form and style. The student should obtain from the Graduate School a copy of the Style Manual for Thesis and

Dissertations, which defines these standards. Three copies of an abstract (not longer than 600 words) must be filed with the Graduate School at least three weeks before the date of the public defense.

## Doctor of Education

General Requirements. The degree of Doctor of Education is granted in recognition of mastery of theory, practice, and research in professional education or in health, physical education, and recreation. In addition to a primary specialization, the student's plan of study should include work in supporting areas of education, foundation areas, a research area, and some noneducation courses related to the program.

With the exceptions noted here, the general requirements for the qualifying examination, residence, comprehensive examinations, thesis, and final examinations for the D.Ed. degree are the same as those listed above for the Ph.D. degree.
Thesis. The doctoral dissertation may be either a report of research which makes an original contribution to knowledge or a study in which the student deals with knowledge already available and produces a constructive result of importance and value for educational practice. The dissertation proposal should be developed early in the doctoral program.
Advancement to Candidacy. Advancement to candidacy for the D.Ed degree in the College of Education is based on proficiency shown in comprehensive examinations and the recommendation of a doctoral advisory committee. The comprehensive examinations may be taken only after the student has (1) been admitted to the degree program, (2) completed substantially all of the total course work planned, and received the consent of an adviser to take the examinations. Students interested in the D.Ed. degree in the College of Health, Physical Education, and Recreation must meet requirements established by that school.

## Doctor of Musical Arts

Requirements for the degree of Doctor of Musical Arts include formal admission, proficiency examinations, languages, a program of study, an area of emphasis, comprehensive examinations, and a dissertation. Please consult the School of Music section of this Catalog for details.

## Fellowships

Teaching and research fellowships are available to qualified graduate students. Applications should be made to the department before March 1. All persons holding these positions must enroll in the Graduate School, and must be admitted to a program leading to an advanced degree.
Teaching Fellowships. Nearly all schools and departments award graduate teaching fellowships. Stipends range from $\$ 2835$ to $\$ 6500$ for an academic year. Graduate students holding appointments at .50 may register for a maximum of 10 hours and a minimum of 6 hours; at .30 may register for a maximum of 12 hours and a minimum of 9 hours ; at .15 may register for a maximum of 15 hours and a minimum of 9 hours. Tuition for graduate teaching fellows is normally waived.
Research Fellowiships. A number of departments and schools employ graduate students to work on research projects under the supervision of faculty members for up to 15 hours a week. Funds come from research grants and contracts. Stipends, fees, and credit hour enrollment limitations are about the same as for graduate students with teaching fellowships. Tuition is generally waived for graduate research appointments. It is sometimes possible to extend these fellowships through the summer, thus increasing the total stipend.
Special Fellowship Programs. Graduate students at the University of Oregon are normally eligible for fellowship awards granted by the federal agencies and privately endowed foundations. Specific information concerning the programs available may be obtained in the office of the Graduate School.
Postdoctoral Felloweships. The University of Oregon participates in several postdoctoral fellowship programs and provides facilities for postdoctoral study under faculty supervision.
Loans. Graduate students are eligible for loans from University loan funds and from funds available under the federal student loan programs. Information regarding loans may be obtained from the Office of Financial Aid in Oregon Hall.

## Research Institutes

Several interdisciplinary institutes administered through the Graduate School provide opportunities for graduate training and research in addition to those offered by schools and departments. Institute staff members hold joint appointments in related teaching departments. Graduate students who intend to do thesis research work in one of the institutes must also satisfy the graduate degree requirements of the related department through which they will receive their degree.

Students who want to work in any of the fields may obtain detailed information concerning the programs and available financial aid from the institute directors whose names appear below.

Oregon Institute of Marine Biology
Paul P. Rudy, Ph.D., Associate Professor of Biology, Director
Robert C. Terwilliger, Ph.D., Associate Professor of Biology, Assistant Director.

The Oregon Institute of Marine Biology is situated on about 85 acres of property along Coos Bay at Coos Head, on the Oregon coast. The many different marine environments in that area provide the institute with an ideal situation for the study of marine organisms. The institute offers a full program of summer study, and facilities for individual research are available throughout the year. The training deals principally with living marine organisms and is a strong complement to the work of a traditional campus course. Advanced students may undertake specialized work or research on an individual basis.

Current research is centered in the areas of the physiology of salt and water balance, biochemistry of respiratory pigments, and marine ecology. Each spring, the Institute offers a multidisciplined course for undergraduates entitled "People and the Oregon Coast." The course is fully described on page 50 .
In the fall term at the Institute, a program is offered for undergraduate biology majors and graduate students. Courses include Marine Ecology, Invertebrate Zoology, Biology of Estuarine Systems, and an opportunity to carry out a research project in these areas. A full seminar program on a variety of topics is also arranged for this term.

Detailed information and applications may be obtained from the Department of Biology on the Eugene campus or by writing to : Director, O.I.M.B., Charleston, Oregon 97420.

## Institute of Molecular Biology

Peter H. von Hippel, Ph.D., Professor of Chemistry, Director.
Sidney A. Bernhard, Ph.D., Professor of Chemistry.
Roderick A. Capaldi, Ph.D., Assistant Professor of Biology.
Frederick Dahlquist, Ph.D., Associate Professor of Chemistry.
O. Hayes Griffith, Ph.D., Professor of Chemistry.
Ira. Herskowitz, Ph.D., Associate Professor of Biology.
Brian W. Matthez's, Ph.D., Professor of Physics.
Aaron Nozick, Ph.D., Professor of Biology.
John A. Schellman, Ph.D., Professor of Chemistry.
Gerald Smith, Ph.D., Assistant Professor of Biology.
Karen U. Sprague, Ph.D., Assistant Professor of Biology.
Franklin W. Stahl, Ph.D., Professor of Biology.
George Streisinger, Ph.D., Professor of Biology.

## Associates

Edwerard Herbert, Ph.D., Professor of Chemistry.
Warner L. Peticolas, Ph.D., Professor of Chemistry.
William R. Sistrom, Ph.D., Professor of Biology.
Raymond G. Wolfe, Ph.D., Professor of Chemistry.

The Institute of Molecular Biology offers the facilities, support, and research guidance necessary for investigations of biological problems at the molecular level. The approach is interdisciplinary, with the techniques of biology, chemistry, and physics all being brought to bear as appropriate. Problems under active investigation include: spectroscopic studies of compounds of biological interest, determinations of the three-dimensional atomic structures of proteins and nucleic acids, the role of solvent in determining macromolecular structure and stability, mechanisms of enzyme catalysis, membrane structure and function, protein-nucleic acid interactions, mechanisms and regulation of protein and nucleic acid synthesis, the molecular basis of mutation and
recombination, and the molecular basis of genetic expression.

Staff members hold joint appointments in the science departments at the University. Research scientists are encouraged to visit the institute for varying periods. Graduate awards are given by the institute and fellowships from the National Institutes of Health are administered under the program.

Institute of Theoretical Science
Paul L. Csonka, Ph.D., Director and Associate Professor of Physics.
Nilendra G. Deshpande, Ph.D., Visiting Associate Professor of Physics.
Russell J, Donnelly, Ph.D., Professor of Physics.
Marvin D. Girardeau, Pl.D., Professor of Physics.
Amit Gosz'ami, Ph.D., Professor of Physics.
David R. Herrick, Ph.D., Assistant Professor of Chemistry.
Rudolph C. Hre'a, Ph.D., Professor of Physics.
Ilmun Ju, Ph.D., Research Associate. Michael Kellman, Pl.D., Research Associate.
John V. Leahy, Ph.D., Associate Professor of Mathematics.
Philip Mannhein, Ph.D., Research Associate.
Robert M. Mazo, Ph.D., Professor of Chemistry.
Joel W. McClure, Ph.D., Professor of Physics.
Michael J. Moravcsik, Ph.D., Professor of Physics.
Davison E. Soper, Ph.D., Assistant Professor of Physics.
Robert L. Zimmerman, Ph.D., Associate Professor of Physics.
The Institute of Theoretical Science provides a center for interdisciplinary research in overlapping areas of theoretical physics, theoretical chemistry, and mathematics. Current research is centered in the areas of statistical mechanics, chemical physics, theory of solids and liquids, nuclear theory, elementary particle theory, accelerators, astrophysics, general relativity, and applied mathematics.

Graduate students with adequate preparation in one of the science departments may elect thesis research in the Institute. The Institute also sponsors postdoctoral research associateships and visiting professorships, usually funded by the U.S. Atomic Energy Commission and National Science Foundation:

Oregon Institute for Land Use Research
Jerome Diethelm, M.L.Arch., Director. Participating Faculty
Landscape Architecture : Gene Bressler, Richard Britz, Kenneth Helphand, Ronald Lovinger, Joseph Meyers. Urban Planning: Ting-Li Cho, Gregory Lipton, David Povey, Richard Ragatz.
Geography: Samuel Dicken, Jack Mrowka, William Loy, Edward Price. Everett Smith, Alvin Urquilart.
Bureau of Governmental Research: Don Johnson, Robert Keith, James Mattis, Karen Seidel, Ken Tollenaar, Mark Westling.
Architecture : Robert Harris, Wilmot Gilland, Pasquale Piccioni.
Biology : Stanton Cook, Paul Rudy. Economics: Edward Whitelaw. Finance: Richard Lindholm. Geology: Frederick Swanson. Law: George Platt. Political Science: Daniel Goldrich.
The Oregon Institute for Land Use Research was established in January 1975. The formation of the Institute was in recognition of a central task facing Oregon and the nation: the need to establish a healthy balance between the continued growth and development of human potential and the wise management of our land and other related resources. Thus the Institute is intended to provide the necessary visibility and presence for existing faculty research, community service projects, and graduate-program activities in the broad area of landscape, land-use planning, and land-related policy analysis.

## Solar Energy Center

John S. Reynolds, M.Arch., Professor of Architecture, Director.
David K. McDaniels, Ph.D., Professor of Physics.

## Associates

Dan Kaehn, Ph.D., Research Associate in Physics.
M. Steven Baker, M.U.P., Research Associate in Architecture.
Jeanne A. Ford, M.A., Research Associate in Physics.
G. Z. Browin, M.A., M.B.A., M.Arch., Assistant Professor of Architecture. Douglas Lowndes, Ph.D., Associate Professor of Physics.
Peter N. Swan, LL.B., Professor of Law.
A. Mark Westling, Planning Consultant, Bureau of Governmental Research.
The Solar Energy Center emphasizes research toward a regional approach to the utilization of the sun's radiant energy for leating water and the heating and cooling of buildings. Current work includes expanded collection and improved monitoring of insolation data in Oregon, further development of optimum collectorreflector combinations, and development of passive solar design information. The Center's efforts also include the development and distribution of information, the development of needed technology and facilitating its application, and the study of legal, economic, and subsequent technical problems which accompany solar energy development in this region.

University research personnel in the areas of Architecture, Business Administration, Law, and Physics are initially involved in the Center, together with Mechanical Engineering personnel at Oregon State University.

In addition to continuing publications, the Center sponsors frequent seminars attended by University and community people involved in various aspects of solar energy utilization. Oneweek summer workshops in solar monitoring and data management are offered, in conjunction with Oregon State U'niversity's Department of Atmospheric Sciences. Courses in solar energy are offered in the Departments of Architecture and Physics.

## Inter-University Centre of Postgraduate Studies, Dubrovnik, Yugoslavia

University of Oregon faculty, graduate and undergraduate students are eligible to participate in the Inter-University Centre of Postgraduate Studies in Dubrovnik, Yugoslavia. The Centre, an international consortium of ninety universities, offers an in-residence program of seminars in the humanities, social sciences, and natural sciences throughout the academic year. Seminars are multi-disciplinary and generally of one-month duration. Faculty are recruited from member universities. University of Oregon faculty have participated in Centre activities since Oregon became a member in 1973.

Fees are approximately $\$ 22.00$ per month ; in-residence room and board costs are approximately $\$ 9.00$ per day. Arrangements for academic graduate credit may be made through the Gradu-
ate School. Individuals wanting further information should consult Benton Johnson, Professor of Sociology, who is the University's coordinator for Centre activities.

Institute for Social Science Research

John Orbell, Ph.D., Professor of Political Science, Director.
Joyce Mitchell, Ph.D., Professor of Political Science.
William Mitchell, Ph.D., Professor of Political Science.
Lazrence Pierce, Plı.D., Associate Professor of Political Science.
Lazerence Carter, Pl.D., Assistant
Professor of Sociology.
Walter Martin, Ph.D., Professor of Sociology.
Robyn Dazees, Ph.D., Professor of Psychology.
Richard J. Hill, Ph.D., Professor of Sociology.

## Gradutate Fellowes

Alphons van de Kragt, Sociology. Marlene McKinnon, Sociology.
The Institute for Social Science Research was established to facilitate the investigation of the broad range of problems addressed by the various social sciences. Of particular concern is the provision of basic support for those areas of inquiry which demand interdisciplinary cooperation.

The Institute houses an archive containing data collected in various national and regional surveys as well as selected census files. These data are available to both faculty and students for purposes of secondary analysis. The Institute also maintains a small research library whose holdings are primarily in the area of evaluation research. A working paper series has been established to facilitate the dissemination of the results of research conducted by those associated with the Institute.


## Procedures Leading to Doctoral Degrees

## Procedure

(1) Admission.
(2) Course work and residence. Student's advisory committee, appointed by school or department, determines the program, which must include three years of work beyond the bachelor degree, of which at least one academic year (three consecutive terms of full-time study-minimum of 9 completed credit hours per term) must be spent on the Eugene campus.
(3) Foreign languages or specialized knowledge.
(4) Comprehensive examination covers the major discipline comprehensively ; advances the student to candidacy for the degree.
(5) Thesis required for all doctorates.
(6) Application for degree.
(7) Defense of thesis. Dissertation committee normally consists of at least three members from the graduate faculty of the candidate's major department or school as well as an additional member of the graduate faculty not affiliated with that department or school who is regarded as a representative of the Dean of the Graduate School.
(8) Thesis publication. $\$ 25.00$ fee required.
(9) Granting of degree.
(10) Certificate of completion.
(11) Diploma.

> Responsible Agency Department, school, or college. $\begin{aligned} & \text { Department, school, } \\ & \text { or college. }\end{aligned}$

Advisory committee ; college, school, or department.

Department, school, or college.

Department, school, or college.

Student via Registrar.
Department, school, or college.

Graduate School and Business Office.

General faculty, on certification by Graduate School; Registrar.

Graduate School; Registrar.

Registrar.

## Chronology

First step.

After appointment of advisory
committee committee.

Before comprehensive examination.

After substantially all course work has been taken, and after virtually all other requirements for the degree have been satisfied except the completion of the dissertation and the defense of it.

After comprehensive examination. Thesis abstracts must be filed with the Graduate School not later than three weeks before date of defense of thesis.

First three weeks of the term.
Acceptance of thesis within three years after advancement to candidacy (otherwise a new comprehensive exanination must be taken).

Before certification of completion.

After all requirements have been satisfied. At end of term in which all degree requirements are satisfied.
Dated as of Commencement.


College of

## Arts and Sciences

## Purposes and Programs

The College of Arts and Sciences is the nucleus of the University. Its faculty seeks to generate, advance, and communicate knowledge in its manifold formis. Students in the College's courses and programs are encouraged to learn different approaches toward organizing facts and developing insights, to think with discipline and alertness, to discern between truth and error, and to express themselves with precision and clarity. Through general courses in the sciences, the social sciences, and the humanities, students gain a wide perspective of human experience and the physical universe. Concentrated effort in one area provides the developed competence needed for present and future personal and career choices. A degree program within the College of Arts and Sciences should provide a sound foundation for a lifetime of intellectual growth.

The University of Oregon has a welldeveloped tradition of emphasis on liberal education. As its name implies, the College of Arts and Sciences, the liberal arts component of the University, offers a wide spectrum of curricular choices. Students majoring in the liberal arts disciplines, as well as those planning a major in one of the several professional schools of the University, take a core of courses in the three broad areas of the College-humanities, social science, and science. Thus the courses offered in the College range from those designed to provide a general liberal arts base for professional degrees, to those of an advanced and specialized nature. The latter are intended to bring students to the limits of knowledge and understanding in areas of inquiry within the College and to encourage their participation in efforts to extend those limits.

The instructional departments of the College are: Anthropology, Biology, Chemistry, Classics, Computer Science, East Asian Languages, Economics, English, Geography, Geology, German and Russian, History, Linguistics, Mathematics, Philosophy, Physics, Political Science, Psychology, Religious Studies, Romance Languages, Sociology, and Speech.

The College also provides administrative support for the Robert D. Clark

Honors College, the Museum of Na tural History, and for numerous interdisciplinary and special programs: Asian studies, Classical Archaeology, Classical Civilization, Comparative Literature, Ethnic Studies, General Humanities, General Literature, General Science, Latin American Studies, Russian and East European Studies, and Women's Studies. Preparatory programs for careers in dentistry, medical technology, medicine, nursing, and pharmacy are available through the science departments of the College.

Courses and services to help students achieve personal and academic success are provided through academic departments and programs, and centrally through the Learning Resources Center, and the Center for Self-Development.
John Baldwin, Ph.D., Dean
Robert Berdahl, Ph.D., Associate Dean Alison Baker, M.P.A., Associate Dean. Daniel Weill, Ph.D., Associate Dean.

## Contents

Departments of Instruction
pages 38 to 150
Robert D. Clark Honors College pages 151 to 153
Interdisciplinary Studies and
Programs pages 154 to 163
Prehealth Sciences pages 164 to 168



## Anthropology

## Faculty

Don E. Dumond, Ph.D., Department
Head, Professor of Anthropology
(New World archaeology). B.A., New Mexico, 1949 ; M.A., Mexico City College, 1957 ; Ph.D., Oregon, 1962.
C. Melvin Aikens, Ph.D., Professor of Anthropology (New World archaeology). B.A., Utah, 1960 ; M.A., 1962, Ph.D., 1966, Chicago.
William S. Ayres, Ph.D., Assistant Professor of Anthropology (Pacific archaeology ; Old World prehistory). B.A., Wyoming, 1966 ; Ph.D., Tulane, 1973.

Richard P. Chaney, Ph.D., Associate Professor of Anthropology (crosscultural methods). B.A., 1963, Ph.D., 1971, Indiana.
Vernon R. Dorjahn, Ph.D., Professor of Anthropology (cultural anthropology, Africa). B.S., Northwestern, 1950 ; M.A., Wisconsin, 1951 ; Ph.D., Northwestern, 1954.
Madronna Holden, Ph.D., Assistant Professor of Anthropology and Ethnic Studies (joint appointment with Ethnic Studies program) (cultural anthropology, folklore, American culture, fieldwork, women's roles). B.A., St. Martin's College, 1968; M.A., 1971, Ph.D., 1974, New School for Social Research.
John R. Lukacs, Ph.D., Assistant Professor of Anthropology (physical anthropology, palaeoanthropology, dental evolution, South Asia). A.B., 1969, M.A., 1970, Syracuse ; Ph.D., Cornell, 1977.
Malcolm McFee, Ph.D., Associate Professor of Anthropology (cultural anthropology, North American Indians). B.A., San Jose State, 1956 ; M.A., 1958, Ph.D., 1962, Stanford. (On leave 1978-79.)
Geraldine Moreno-Black, Ph.D., Assistant Professor of Anthropology (physical anthropology; primate ecology and evolution). B.A., State University of New York, Buffalo, 1967 ; M.A., Arizona, 1970 ; Pl.D., Florida, 1974.

Ann G. Simonds, Ph.D., Assistant Professor of Anthropology (cultural anthropology; history of anthropological theory). B.A., 1959, Ph.D., 1964 California, Berkeley.
Paul E. Simonds, Ph.D., Professor of Anthropology (human evolution, primate behavior). B.A., 1954, M.A., 1959, Ph.D.; ,1963, California, Berkeley.

Theodore Stern, Plı.D., Professor of Anthropology (cultural anthropology; North American Indians, Southeast Asia). B.A., Bowdoin, 1939; A.M., 1941, Ph.D., 1948, Pennsylvania.
Robert Tonkinson, Ph.D., Associate Professor of Anthropology (social anthropology; Oceania and Australia). B.A., 1962, M.A., 1966, Western Australia ; Ph.D., British Columbia, 1972. (On leave 1977-79.)
Philip D. Young, Ph.D., Associate Professor of Anthropology (social anthropology; Latin America). B.A., 1961, Ph.D., 1968, Illinois.

## Faculty Emeriti

Homer G. Barnett, Ph.D., Professor Emeritus of Anthropology (cultural change). A.B., Stanford, 1927 ; Ph.D., California, 1938; at Oregon since 1939.
Luther S. Cressman, Ph.D., Professor Emeritus of Anthropology (archaeology of western North America). A.B., Pennsylvania State, 1918; S.T.B., General Theological Seminary, 1923 ; M.A., 1923, Ph.D., 1925, Columbia ; at Oregon since 1929.

## Undergraduate Studies

Anthropology embraces the study of human development and diversity, both physical and social, and may be divided between social or cultural anthropology, physical anthropology, and prehistory. The courses offered are intended to provide a broad understanding of human nature and society for students in all fields, as well as integrated programs for majors in anthropology.

Recent graduates in anthropology who have not chosen to continue their studies beyond the baccalaureate are to be found in all of those pursuits normally open to other graduates in the various liberal arts, as well as among teachers of social studies in secondary schools. A baccalaureate degree alone, however, is seldom sufficient to permit the graduate to secure professional employment as an anthropologist or as a social scientist.

High school students planning to major in anthropology are advised to take two years of high school mathematics, preferably algebra, and some work in a modern foreign language, preferably German, Russian, French, or Spanish. Students should also have a sound background in English, so that they can read with understanding and express themselves with clarity.

A two-year transfer student is advised to come with a year's work in introductory anthropology if possible,
otherwise, with introductory courses in other social sciences. Introductory biology, introductory computer science, and the equivalent of two years of college instruction in one of the modern foreign languages listed above will be helpful.

The department offers work leading to the Bachelor of Arts and the Bachelor of Science. The major requirements are the same for both (differences between the two degrees in other respects are explained in the general section of the catalog).

Majors in anthropology are required to take the following courses: (1) 9 credit hours in introductory anthropology (100-200 level ; Anth 199 does not qualify) ; (2) 9 credit hours in physical anthropology at the 300-499 level; (3) 9 credit hours in cultural anthropology at the 300-499 level ; (4) 9 credit hours in prehistory at the 400 level (Anth 408, 464, 465, and 466 do not qualify) ; (5) three elective courses (at least 9 credit hours) at the 400 level.

Of the 45 credit hours in anthropology, 36 credit hours must be graded ( toward which no more than 6 hours with the grade of D may be counted). To insure a broad liberal education, it is strongly recommended that the student limit undergraduate work in anthropology to a maximum of 51 credit hours. Students planning to do graduate work are advised, but not required, to complete two years of one or more foreign languages. Preparation in statistics and computer science is desirable.

## Model Programs for the Undergraduate Major

Major requirements may be met by the following schedule. Freshman year : three courses in introductory anthropology, chosen from Anth 101, 102, 103, 104, 207, 208, 209, 210, 211 (may be taken in any combination or order). Sophomore year : no prescribed anthropology courses; may choose electives among Anth 207, 208, 209, 210, 211. Junior year: 9 credit hours in cultural anthropology, Anth 301, 302, 303 or Anth $310,420,445,446,447,448$, or area sequences ; 9 credit hours in physical anthropology, chosen from Anth 320, 321, 322, 323, 324, 333, 470, 474, $475,476,477,478,479$. Senior year : three courses in prehistory, chosen from Anth 411, 412, 413, 461, 462, 463 (may be taken in any combination or order) ; 3 optional courses (at least 9 credit hours) at the 400-499 level.

## Secondary School Teaching

The Department of Anthropology offers a program leading to certification
as a teacher of social studies in junior or senior high schools. This program, however, is subject to revision in order to meet changes in certification requirements. For specific and current information, students should consult the designated departmental norm adviser and the Office of Secondary Education in the College of Education.

## Graduate Studies

Three advanced degrees are offered in anthropology, the Master of Arts, the Master of Science, and the Doctor of Philosophy. These degrees entail work in the following subfields: archaeology, cultural anthropology, linguistics, and physical anthropology. Graduate students are required to demonstrate competence in each of these subfields, ordinarily in work at the master's level. Consequently, the first year, and, in some instances, the first two years of graduate study are devoted to achieving a broad foundation in anthropology for the specialization to follow.

The masters' degrees each require a minimum of 45 credit hours of graduate work, of which at least 30 must be in anthropology, and the successful completion of an examination in each of the four subfields of anthropology mentioned above. No thesis is required. To receive the M.A., the candidate must also demonstrate competence in one foreign language. There is no language requirement for the M.S., but the candidate for that degree must demonstrate proficiency in one special skill (such as statistics or computer science) approved by the department faculty. The master's degrees are appropriate for employment in certain positions in government, museums, or junior colleges.

There are no absolute requirements for admission to the master's program. A baccalaureate degree in anthropology is helpful, but by no means required. Admission is limited, however, and preference is given to those applicants with good overall academic records who have had at least a solid beginning in anthropology, who have had some training in foreign languages, and who can demonstrate evidence of a sincere interest in the field.

Requirement for admission to the doctoral program is the possession of a valid master's degree in anthropology from a recognized institution, or the completion of the master's examinations. Those who enter with a master's degree in another discipline, therefore, will take the master's examinations early in the program.

The Plı.D. qualifies the holder for full university teaching and research careers, in addition to those just noted. Formal requirements of time and credit are secondary, but no candidate will be recommended for the degree until the minimum Graduate School requirements for credits, residence, and study have been satisfied. In addition, the department requires that the candidate demonstrate competence in two modern foreign languages or in two substitute special skills, approved by the department faculty. The student's progress is determined by performance on the master's examinations, in course work, research papers, in a comprehensive examination in three special fields of concentration within anthropology, and finally in the dissertation. The dissertation should be based upon original research, which ordinarily involves field or laboratory work. It must be written in fully professional and publishable style appropriate to the subfield of specialization.

Information regarding general requirements of the Graduate School is included in the appropriate section of this catalog. More specific information regarding advanced degree programs in anthropology may be obtained from the Department of Anthropology.

Note: Not all courses listed are offered each year. For specific and current information, consult the yearly Time Schedule of Classes, or inquire at the departmental office.

## Undergraduate Courses

## Anth 101. Introduction to Physical

Anthropology. 3 credit hours. Homo sapiens as a living organism; biological evolution; fossil hominids. Two lectures, one discussion period. Lukacs, Moreno-Black, P. Simonds.
Anth 102. Introduction to Prehistory.
3 credit hours. Archaeological evidence for the evolution of human culture. Two lectures, one discussion period. Aikens, Ayres, Dumond.
Anth 103. Introduction to Cultural Anthropology. 3 credit hours. Organization and functioning of society and culture: Two lectures, one discussion period. Chaney, McFee, Stern.
Anth 104. Introduction to Monkeys and Apes. 3 credit hours. Introduction to the evolution and biology of the primates. Topics include the fossil record and changing ecology during the age of mammals, comparative primate anatomy as a means of understanding locomotor and feeding adaptations, taxonomic relations, and an introduction to primate ethology.
Anth 199. Special Studies. 1-3 credit hours.

## Anth 207. Introduction to Human

Ethology. 3 credit hours. The study of human behavior from the basis of animal ethology. Material is drawn primarily from primate behavior, cultural anthropology, and
recent works concerning human behavioral biology. P. Simonds.
Anth 208. Introduction to the History of Anthropology. 3 credit hours. Lectures and readings on the historical development of the major anthropological theories, methods, and concepts. Anthropology 103 recommended as prerequisite. A Simonds.

## Anth 209. Introduction to Language and

 Culture. 3 credit hours. General introduction to language and culture relationships and the methodology of language and culture study.
## Anth 210. Selected Topics in Ethnology.

3 credit hours. Selected topics in cultural anthropology. Content will vary from term to term but will emphasize the comparison of cultures and the anthropological understanding of contemporary peoples. May be repeated for credit with different subtitles.
Anth 211. Selected Topics in Physical
Anthropology. 3 credit hours any term. Selected topics in physical anthropology. Content will vary from term to term but will draw frons various aspects of human and primate evolution, anatomy, and ethology. May be repeated for credit, with the consent of the instructor.
Anth 301, 302, 303. Society and Culture. 3 credit hours each term. An introductory course in cultural anthropology for upperdivision students. People from different parts of the world are examined in detail, with emphasis on comparative social or ganization. Prerequisite :upper-division standing.
Anth 310. Exploring Other Cultures. 3 credit hours any term. An introduction to how anthropologists study and describe human cultures. Content will vary from term to term but will draw from aspects such as fieldwork and other methods for gathering information, the published reports on other cultures (ethnographies), famous ethnographies and ethnographers, specific ethnographic areas and their problems, comparative study of selected cultures. May be repeated for credit with the consent of the instructor when the topic changes.
Anth 320. Human Ecology. 3 credit hours.
Cultural and biological adaptations to environmental changes in the course of man's evolution. Prerequisite : 9 credit hours in anthropology or biology, or consent of instructor. Moreno-Black.
Anth 321. Paleaoanthropology. 3 credit hours. Fossil evidence of human evolution; man's place among the primates; variability of populations of fossil hominids. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Lukacs, P. Simonds.

## Anth 322. Biology of Living Human

 Populations. 3 credit hours. Genetic and biological structure of human populations; population dynamics and causes of diversity ; analysis of genetically differentiated human populations and their geographic distribution. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Lukacs.Anth 323. Laboratory in Physical Anthropology: Osteology. 3 credit hours. Optional laboratory for students enrolled in Anthropology 320, 321, or 322 . Human and nonhuman primate osteology and osteometry; fundamentals of dissection and primate anatomy.
Anth 324. Evolutionary Biology of the Primates. 3 credit hours. Comparative biology and anatomy of the nonhuman primates with special emphasis on evolutionary trends and adaptive complexes. MorenoBlack.

Anth 333. Food and Culture. 3 credit hours. Interrelationship between culture and biology as specifically seen in the area of human nutrition. Emphasis will be on the anthropological approach to the role of nutrients in human development (individual and populational) as well as cultural determinants which influence, emphasize and result in populational differences. Other topics include: Anthropology and World Food Policy, Applied
Nutritional Anthropology. Moreno-Black.
Anth 401. Research. Credit hours to be arranged.
Anth 403. Thesis. Credit hours to be arranged.
Anth 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses <br> Carrying Graduate Credit

Anth 407. Seminar. (G) Credit hours to be arranged.
Anth 408. Field Work in Anthropology.
(G) Credit hours to be arranged.

Anth 409. Practicum. (G) Credit hours
(1-3) to be arranged.
Anth 410. Experimental Course. (G)
Credit hours to be arranged.
Anth 411. European and African Prehistory. (G) 3 credit hours. Survey of the main developments in the prehistory of Europe and Africa, with emphasis on the Paleolithic. Upper-division standing required. Ayres.
Anth 412. South and East Asian Prehistory. (G) 3 credit hours. Survey of the main developments in the prehistory of India, China, and southeast Asia. Upper-division standing required. Ayres.
Anth 413. Near Eastern Prehistory. (G)
3 credit hours. Survey of the main developments in the prehistory of the Near East, with emphasis on the development of early civilizations. Upper-division standing required. Ayres.
Anth 414. Race and Culture. (G) 3 credit hours. Racial classifications and comparisons; the biological base of culture; attitudes toward race in human relations. Prerequisite : 9 credit hours in anthropology, or consent of instructor. Moreno-Black, P. Simonds.
Anth 415. Cultural Transmission. (G) 3
credit hours. Methods of child rearing education, and social control among primitive peoples. Prerequisite: 9 credit hours in anthropology, or consent of instructor. McFee, Stern,
Anth 416. History of Anthropology. (G) 3 credit hours. A nontheoretical exposition of the beginnings and specialized developments within the fields of archaeology, physical anthropology, ethnology, and linguistics. Pre requisite: 9 credit hours in anthropology, or consent of instructor. Chaney, McFee.
Anth 417. The American Indian: North America. (G) 3 credit hours. Indian and Eskimo life in North America before white contact ; contemporary life. Prerequisite: 9 credit hours in anthropology, or consent of instructor. McFee.
Anth 418 The American Indian: Mexico and Central America. (G) 3 credit hours. Contact period and contemporary ethnography of native peoples; ecological adaptation, socio-economic organization, culture change. Prerequisite : 9 credit hours in anthropology, or consent of instructor.
Anth 419. The American Indian: South America. (G) 3 credit hours. Contact periorl
and contemporary ethnography of native peoples; ecological adaptation, socio-economic organization, and culture change. Prerequisite : 9 credit hours in anthropology, or consent of instructor.
Anth 420. Culture and Personality. (G) 3 credit hours. Interrelation of group and individual conceptual frameworks in crosscultural study of human behavior. Prerequisite : 9 credit hours in cultural anthropology, or consent of instructor. Chaney.
Anth 423, 424, 425. Peoples of the Pacific. (G) 3 credit hours. each term. Fall: Aboriginal Australia, traditional culture and social change. Winter: Melanesia, cultural themes, social organization, religion, Cargo Cults. Spring : Micronesia and Polynesia, migration theories, ecology and social stratification, contemporary politics and problems. Prerequisite: 9 credit hours of social or cultural anthropology, or consent of instructor.
Anth 426, 427, 428. Peoples of Africa. (G) 3 credit hours each term. The cultures of Sub-Saharan Africa; their history and development; their contemporary problems. Fall: current problems and South Africa. Winter: Central and East Africa. Spring: West Africa, the Sudan, and the Sahara. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Dorjahn.
Anth 438, 439, 440. Peoples of Southern and Eastern Asia. (G) 3 credit hours each term. Introduction to the cultures of India and Pakistan, China, and Southeast Asia; development of distinctive culture configurations ; interrelationships of culture; impact of westernization; ethnic and linguistic factors. Fall: South Asia; winter: the Chinese culture sphere; spring: Southeast Asia. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Stern.
Anth 441, 442, 443. Linguistics. (G) 3 credit hours each term. Fall: nature and forms of language; linguistic structure and change; relation of language and culture; macrosociolinguistics. Winter: sound patterning (phonetics and phonemics) ; grammatical structuring (morphology and syntax) ; micro sociolinguistics. Spring: techniques of sociolinguistic and descriptive linguistic recording and analysis ; work with native tspeakers. Prerequisite: senior standing, consent of instructor.
Anth 444. Religion and Magic of Primitives. (G) 3 credit hours. The religions and systems of magic of primitive peoples as reflections of their thought processes; supernatural systems in the life of primitive people. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Stern.

## Anth 445. Folkiore and Mythology of

 Primitives. (G) 3credit hours. Unwritten literature as an expression of the imaginative and creative thought of primitive peoples. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Stern.Anth 446. Art Among Primitives. (G) 3 credit hours. The artist and aesthetic expression among primitive peoples. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Stern.

## Anth 447. Kinship and Social Structure.

(g) 3 credit hours. An empirical and theoretical examination of the interrelationship of kinship and the structure of society. Prerequisite : Anth 103, or Anth 301, 302, 303 or consent of instructor. A. Simonds.
Anth 448. Contemporary Issues in Anthropology. (G) 3 credit hours. An overview of diverse presuppositions that structure various theoretical and methodological orientations in contemporary anthropological discussions.

Prerequisite: 9 credit hours of cultural anthropology, or consent of instructor. Chaney. Anth 450, 451, 452. Cultural Dynamics. (G) 3 credit hours each term. Evaluation of approaches to the problem of cultural changes; analysis of invention and intergroup cultural borrowing; agents and conditions promoting change; mechanics of cultural growth; application of techniques for inducing change. Prerequisite: 9 credit hours in anthropology, or consent of instructor. Chaney.
Anth 456, 457, 458. Communication and Culture. (G) 3 credit hours each term. information theory and social psychology. nonverbal signals, codes, messages, and networks; an integration of anthropology with information theory and social psychology. Prerequisite: 9 credit hours in anthropology or consent of instructor.

## Anth 461. North American Prehistory.

 (G) 3 credit hours. Survey of interdisciplinary research applied to prehistoric man and his environment in North America. Prerequisite: 9 credit hours in anthropology, or consent of instructor.Anth 462. Middle American Prehistory.
(G) 3 credit hours. The archaeology and prehistory of Mexico and Central America Prerequisite: 9 credit hours in anthropology, or consent of instructor. Dumond.
Anth 463. South American Prehistory. (G) 3 credit hours. Survey of interdisciplinary research related to prehistoric man in South America. Prerequisite: 9 credit hours in anthropology, or consent of instructor.
Anth 464. Scientific Aids in Archaeology. (G) 3 credit hours. Research methods applied to archaeological problems. Includes dating and discovery techniques; analysis of materials, human remains, diet and ancient technology; interdisciplinary research strategies. Prerequisite: 9 credit hours of anthropology, or consent of instructor.
Anth 465. Prehistoric Technology. (G) 3 credit hours. Introduction to stone-flaking techniques; manufacturing of stone artifacts typological analysis of tools. Investigation of tool usage and microscopic analysis of wear patterns; instructor's consent.
Anth 466. Tabletop Archaeology. (G) 3 credit hours. Simulated archaeological excavation, followed by preparation of descriptive and comparative reports. Prerequisite : 9 credit hours in advanced prehistory courses, and consent of instructor. Aikens.
Anth 470. Human Population Genetics. (G) 3 credit hours. The development of theoretical and mathematical models in population genetics and their applicability to human populations. Work requires the use of algebra, some differential calculus, and presumes an understanding of elementary genetics. Consent of instructor required. Lukas.
Anth 474. Advanced Laboratory in Physical Anthropology. (G) $3-6$ credit hours. Introduction to techniques for the assessment and analysis of genetic, physiological, and anthropometric variability in living human populations. Registration in excess of 3 credit hours must have instructor's consent. Prerequisite: Anth 322 (may be taken concurrently).
Anth 475. Primate Behavior. (G) 3 credit hours. Ecology and ethology of free-ranging primates. Classification, distribution and ecological relationships of the living primates social structure and social organization of a variety of species. Materials are drawn primarily from field studies, secondarily from laboratory studies. Prerequisite: upper-
division standing, or consent of instructor. P. Simonds.

Anth 476. Primate Anatomy. (G) 3 credit hours. Comparative functional anatomy of the primates. Emphasis upon bone-muscle relationships of the loconotor and masticatory skeleton. Comparison of living and fossil primates, including nan. Prerequisite: Anth 101, Anth 324, or consent of instructor. Moreno-Black.
Anth 477. Primate Systematics and Taxonomy. (G) 3 credit hours. Historical development of taxonomy; methods and principles of evolutionary classification; numerical phenetics and taxonomic theory; primate and hominid classification. Prereguisite : Anth 320, Antl 321, or consent of instructor. P. Simonds.
Anth 478. Laboratory in Primate Anatomy.
(G) 2 credit hours. Optional Jaboratory for students enrolled in Anth 476. Primate osteology and myology; dissection of specimens; individual projects. Two three-hour laboratory periods. Consent of instructor is required. Moreno-Black.
Anth 479. Palaeoprimatology. (G) 3 credit hours. The fossil record and theoretical implications of the Cenozoic primates with special reference to their various adaptations; locomotion, special senses, dentition. The evolution of hominid characteristics is traced as far as possible. Prerequisite: Anth 320, or consent of instructor. Luckacs, P. Simonds.

## Graduate Courses

Anth 501. Research. Credit hours to be arranged.
Anth 503. Thesis. Credit hours to be arranged. No-grade course.
Anth 505. Reading and Conference. Credit hours to be arranged. No-grade course.
Anth 506. Special Problems. Credit hours to be arranged.
Anth 507. Seminar. Credit hours to be arranged.
Anth 507. Seminar: Research Methods.
Credit hours to be arranged. Orientation of. graduate students to basic research tools, particularly the explicit inductive methods of statistical and other formal anlysis needed to formulate problems and conduct research. Required of majors in the first year of graduate study. Chaney.
Anth 509. Supervised Teaching Practicum. Credit hours to be arranged. No-grade course.
Anth 511. Culture, Society, and the Individual. 3 credit hours. A review and evaluation of the concepts of culture and society, as the terms are employed by anthropologists. The relationships between culture and society, between culture and the individual, and between society and the individual. Prerequisite: graduate standing in the social sciences. McFe, Chaney.
Anth 512. The Beginnings of Civilization. 3 credit hours. The transition from foodgathering to food-producing economies, and from egalitarian to state-level societies. Prerequisite: graduate standing in the social sciences.
Anth 513, 514. Primitive Social Organization. 3 credit hours each term. Primitive social organization, with particular emphasis on family, marriage, residence, descent systems, lineage organization, alliance, and analysis of kinship systems.
Anth 515. Political Anthropology. 3 credit hours. Government in primitive societies, considered from a cross-cultural perspective.

Special attention to political innovations under colonial rule, and to the new nationalistic administrations in Africa and Asia. Prerequisite: graduate standing in social science. Dorjahn.
Anth 516. Economic Anthropology. 3 credit hours. Production, consumption, distribution. and exchange in primitive societies. Economic surplus, change in economic systems, and relationships between nonpecuniary economies and the world economy. Prerequisite: graduate standing in social science. Dorjahn.
Anth 517. Contemporary Indians of the United States. 3 credit hours. Indian life on reservations and in cities, social and cultural dimensions and implications. Problems of lancl, economics, politics and law; Indian health, education and welfare; social problems; religion; treaties, legislation and court decisions. Anthropologists and Indianscurrent studies, theoretical and applied. Prerequisite: graduate standing, or consent of instructor. McFee.
Anth 521. Functional Anatomy. 3 credit hours. Comparative functional studies of primates and other animals. Principles of animal mechanics. Students engage in individual research projects, two three-hour laboratory periods. Prerequisite: Anth 476, Bi 391, 392 , or consent of instructor. Moreno-Black.

## Anth 522. Comparative Morphology and

Human Evolution. 3 credit hours.
Principles of comparative morphology and comparative morphology of the primates. Application to the study of the primate fossils implicated in human evolution. Consent of instructor required.
Anth 526. Archaeology and Anthropology.
4 credit hours. Examination of the use by archaeologists of theoretical and methodological concepts drawn from anthropology, with consideration of the modifications and additions to these concepts made necessary by the nature of archaeological data. Consent of instructor is required. Aikens, Ayres, Dumond.
Anth 530. Cultural Ecology. 3 credit hours.
Comparative analysis of cultural responses to environmental conditions, with implications for cultural evolution. Prerequisite: graduate standing in anthropology or consent of instructor. Dumond.
Geol 541. Archaeological Geology. 3 credit hours. Application of geology to the practice of archaeology. A review of the essential principles of mineralogy, petrology, and stratigraphy; topical discussions of the various applications of geologic methods to archaeological investigation : petrologic examination of the materials of stone-tool industries; characterization and tracing of stone implements; geological stratigraphy; physical techniques of dating materials and deposits; alluvial deposits and stream terraces; interpretation of sediments, soils, stone resources, and environmental geology at archaeological sites. Intended as preparation for professional archaeologists. Two lectures, one two-hour laboratory session per week. Prior study in a physical science strongly recommended. Prerequisite : graduate standing and consent of instructor.

## Anth 570. Basic Graduate Physical

Anthropology. 4 credit hours. An introduction to physical anthropology for graduate students who have had little or no background in the area. Introduces students to the major subfields in physical anthropology; their data, theory, and problems. Topics covered are: geochronology, principles of classification applied to primates, paleoprimatology, paleoanthropology, modern human biology
and diversity, processes of evolution as applied to man, and primate and human ethology. Lukacs, Moreno-Black, P. Simonds. EdP 571. Anthropology ad Education. 3 credit hours. Education viewed as cultural process. The anthropology of teaching : review of cultural anthropology for its relevance to educating; analysis of formal education from an anthropological perspective; education in cross-cultural settings. The teaching of anthropology ; anthropology in the curriculum. Formal and informal modes of enculturation. Prerequisite: graduate standing in anthropology, or classroom teaching experience. Wolcott.
EdP 572. Anthropology and Education. 3 credit hours. Exploration in depth of some problem or issue central to the field of anthropology and education; topic announced in advance. Prerequisite: EdP 571 or Anth 415, or consent of instructor. Wolcott.
Anth 575. Advanced Primate Ethology. 3 credit hours any term. For students of primate behavior and adaptation. Special emphasis is placed on advanced work in primate studies with a focus chosen each time it is offered. May be repeated for credit. Prerequisite: Anth 475 or equivalent work, and consent of instructor. P. Simonds.

## Biology

## Faculty

Sanford S. Tepfer, Ph.D., Department Head, Professor of Biology (plant development ; floral development). B.S., College of City of New York, 1938 ; M.S., Cornell, 1939 ; Ph.D.. California, Berkeley, 1950. (On sabbatical leave 1978-79.)
Andrez' S. Bajer. D.Sc., Professor of Biology (cell division; mechanism and fine structure). Ph.D., 1950, D.Sc., 1956, Cracow.
David L. Barker, Ph.I)., Assistant Professor of Biology (biochemistry of identified nerve cells). B.S., California Institute of Technology, 1963 ; Ph.D., Brandeis, 1969.
Hoziard T. Bonnett, Jr., Ph.D., Professor of Biology (plant morphogenesis).
B.A., Amherst, 1958 : Ph.D., Harvard, 1964.

William E. Bradshau', Ph.D., Associate Professor of Biology (physiological and geographical ecology; photoperiodism and phenology of mosquitoes). B.A., Princeton, 1964 ; M.S., 1965, Ph.D., 1969, Michigan.
Roderick A. Capaldi, Ph.D., Assistant Professor of Biology (membrane structure and function). B.S., London, 1967 ; Ph.D., York, 1970.
George C. Carroll, Ph.D., Associate Professor of Biology (microbiology of coniferous forest canopy) ; B.A., Swarthmore, 1962 ; Ph.D., Texas, 1966.

Richard W. Castenholz, Ph.D., Professor of Biology (algal and microbial ecology). B.S., Michigan, 1952 ; Ph.D., Washington State, 1957.
Stanton A. Cook, Ph.D., Associate Professor of Biology (ecology and evolution). A.B., Harvard, 1951; Ph.D., California, Berkeley, 1960. Russell Fernald, Ph.D., Associate Professor of Biology (Ethology : Netural Processing of Visual Signals). B.S., 1963, Swarthmore ; Ph.D., 1968, Pennsylvania.
Pcter W. Frank, Ph.D., Professor of Biology (population ecology). B.A., Earlham, 1944 : Pli.D.. Chicago, 1951. Philip Grant, Ph.D., Professor of Biology (developmental biology). B.S., College of City of New York, 1947 ; M.A., 1949, Ph.D., 1952, Columbia. Dale Grace, Ph.D., Adjunct Assistant Professor. B.S., 1963, Illinois; M.A., 1967, Ph.D., 1970, UCLA.
Jane Gray, Ph.D., Professor of Biology (paleobotany and palynology). B.A., Raclcliffe, 1951 ; Ph.D., California, Berkeley, 1958.

Donald R. Hague, Ph.D., Associate Professor of Biology (molecular aspects of plant development and function). B.S., Franklin and Marshall. 1953 ; Plı.D., Oregon, 1966.
Patricia Jean Harris, Ph.D., Adjunct Associate Professor of Biology (fine structure and biochemical studies of cell division ). B.S., California, 1954 ; M.S., Yale, 1958 ; Ph.D., California, 1962.
M. Charlene Heimbigner, M.S., Senior Instructor in Biology (algal physiology). B.S., Washington State, 1963 ; M.S., Oregon, 1967.

Ira Herskozitz, Ph.D., Associate Professor of Biology (gene control in bacteriophage, bacteria, and yeast ; phage-host interactions). B.S., California Institute of Technology, 1967 ; Ph.D. Massachusetts Institute of Technology, 1971. (On leave 1978-79.) Harrison M. Hozard, Senior Instructor in Biology (microscopy and scientific photography).
Graham Hoyle. D.Sc., Professor of Biology (neurophysiology). B.Sc., (chemistry, physics), 1944, B.Sc., 1950, (zoology, botany), London; D.Sc., Glasgow, 1955.

Charles B. Kimmel, Ph.D., Associate Professor of Biology (developmental biology). B.A., Swarthmore, 1962 ; Ph.D., Johns Hopkins, 1966.
Bayard H. McConnaughey, Ph.D., Professor of Biology (invertebrate zoology ; marine biology). B.A., Pomona, 1938 ; M.A., Hawaii, 1941 ; Ph.D., California, Berkeley, 1948. Robert W. Morris, Pḷ.D., Professor of Biology (biology of fishes). A.B., Wichita, 1942 ; M.S., Oregon State, 1948 ; Ph.D., Stanford, 1954. (On sabbatical leave winter, 1979.)
Frederick W. Munz, Ph.D., Professor of Biology (visual physiology). B.A., Pomona, 1950 ; M.A., 1952, Ph.D., 1958, California at Los Angeles. Gordon J. Murphy, M.S., Senior Instructor in Biology (natural history) ; Assistant to Department Head. B.S., 1953, M.S., 1958, Oregon State.
Aaron Novick, Pl.D., Professor of Biology (cellular control mechanisms ; membranes) ; Dean of the Graduate School. B.S., 1940, Ph.D., 1943, Chicago.
Edzeard Novitski, Ph.D., Professor of Biology (genetics of higher organisms). B.S., Purdue, 1938 ; Ph.D., California Institute of Technology, 1942.
Lazerence H. Pike, Ph.D., Adjunct
Assistant Professor of Biology (ecology of nitrogen-fixing lichens). B.A., Colby College, 1966 ; M.S., 1967, Ph.D., 1971 , Oregon.

John H. Postlethriait, Plı.D., Associate Professor of Biology (genetic and endocrine regulation of development) B.S., Purdue, 1966 ; Ph.D., Case Western Reserve, 1970.
Paul P. Rudy. Ph.D., Associate Professor of Biology (pliysiology of salt and water balance ) ; Director, Oregon Institute of Marine Biology. B.A., 1955, M.A., 1959. Ph.D.. 1966, California, Davis.
Eric Schabtach, B.S., Senior Instructor in Biology (development and application of new techniques in biological ultrastructural investigations) ; Director, Electron Microscope Facility. B.S., McGill, 1963.
Ronald Sederoff, Pl.D., Assistant Professor of Biology (molecular genetics). B.A., 1961 ; M.A., 1963 ; Ph.D., 1966, UCLA.
William R. Sistrom, Pl.D., Professor of Biology (bacterial physiology). A.B., Harvard, 1950 ; Ph.D., California, Berkeley, 1954.
Gerald R. Smith, Ph.D., Assistant Professor of Biology (genetic regulatory mechanisms; molecular mechanisms of recombination; nucleic acid sequencing). B.S., Cornell, 1966 ; Ph.D., Massachusetts Institute of Technology, 1970.

Arnold L. Soderwall, Ph.D., Professor of Biology (aging and reproduction of rodents). B.A., Linfield, 1936 ; M.A., Illinois, 1938 ; Ph.D., Brown, 1941.
Karen Sprague, Ph.D., Assistant Professor of Biology (structure and function of eukaryotic genes), B.A., Bryn Mawr, 1964, Ph.D., Yale, 1970.
Franklin W. Stahl, Ph.D., Professor of Biology (genetics of bacteriophage); Research Associate, Institute of Molecular Biology. A.B., Harvard, 1951 ; Ph.D., Rochester, 1956.
George Streisinger, Ph.D., Professor of Biology (genetic control and development of nervous systems) ; Research Associate, Institute of Molecular Biology. B.S., Cornell, 1950 ; Ph.D., Illinois, 1954. (On sabbatical leave 1978-79.)
Robert C. Terwilliger, Ph.D., Associate Professor of Biology (comparative physiology and biochemistry) ; Assistant Director, Oregon Institute of Marine Biology. B.A., Bowdoin, 1962 ; M.A., 1964, Ph.D., 1967, Boston.
J. Daniel Udovic, Ph.D., Assistant Professor of Biology (population biology ; mathematical ecology). B.A., Texas, 1970 ; Ph.D., Cornell, 1973.
Steven R. Vigna, Ph.D., Assistant Professor of Biology (comparative endocrinology: functional interactions
between reproductive and digestive systems ). B.S., 1971, Ph.D., 1977, University of Washington.
David H. Wagner, Plı.D., Assistant Professor of Biology (plant taxonomy, evolutionary mechanisms in pteridophytes) ; Curator of Herbarium. B.A., University of Puget Sound, 1968 ; M.S., 1974, Ph.D., 1976, Washington State.
James A. Weston, Ph.D., Professor of Biology (developmental biology). B.A., Cornell, 1958 ; Ph.D., Yale, 1963.
Wayne A. Wiitanen, Ph.D., Associate Professor of Biology (neurobiology ; computer applications in biology). B.A., 1967, M.A., 1968, Ph.D., 1971, Harvard.
Donald E. Wimber, Ph.D., Professor of Biology (structure of chromosomes, localization of gene function). B.A., San Diego State, 1952 ; M.A., 1954, Ph.D., 1956, Claremont.
Herbert $P$. Wisner, M.A., Senior Instructor in Biology (breeding biology, distribution of birds). B.A., 1949, M.A., 1950, Syracuse.

## Faculty Emeriti

Clarence W. Clancy, Ph.D., Professor
Emeritus of Biology (developmental genetics). B.S., 1930, M.S., 1932,
Illinois; Ph.D., Stanford, 1940 ; at Oregon since 1940.
James Keser, Ph.D., Professor Emeritus of Biology (chromosome structure and function). B.A., Iowa, 1930 ; M.S., 1937, Ph.D., 1948, Cornell ; at Oregon since 1954.
Bradley T. Scheer, Ph.D., Professor Emeritus of Biology (hormonal control of molting and metabolism in crustaceans; ionic regulation ; membrane transport). B.S., California Institute of Technology, 1936 ; Ph.D., California, Berkeley, 1940 ; at Oregon since 1950.

## Special Staff

Donald Allen, Ph.D., Research Associate. B.A., 1963, M.A., 1967, Ph.D., 1970, Oregon.
Fanny E. Carroll, Ph.D., Research Associate. Diploma in Pharmacy, University of Paris, 1962 ; Ph.D., Oregon, 1971.
Dhruba Chattoraj, Ph.D., Research Associate. B.Sc., 1962, M.Sc., 1965, Ph.D., 1970, Calcutta University, India.
Carol J. Cogszeell, M.A., Research Assistant. B.A., 1969, M.A., 1971, Oregon.
Jean M. Crasemann, Ph.D., Research Associate. B.A., University of Saskatchewan, Canada, 1942 ; M.A., 1946, Ph.D., 1952, California, Berkeley.

Frances Duryee, B.S., Research Assistant. B.S., 1954, Oregon State University.
Douglas Ereald, Ph.D., Research
Associate. B.A., 1967, Yale ; Ph.D., 1974, California, Berkeley.
Janet Figenshow, B.S., Research
Assistant. B.S., 1974, University of Washington.
Russel G. Grieg, Ph.D., Research Associate. Ph.D., University of Manchester, 1976.
Judith Holy, B.S., Research Assistant. B.S., 1961, Oregon State University. Robert Hard, Ph.D., Research Associate. B.A., 1967, M.S., 1970, University of Washington; Ph.D., 1975, SUNY at Albany.
Christina M. Holzapfel, Ph.D., Research Associate. B.A., Goucher
College, 1964 ; M.S., 1968, Ph.D., 1970, Michigan.
Judith L. Horstmann, M.S., Research Assistant. B.A., Occidental College, 1969 ; M.S., Oregon, 1974.
Carl L. Johannessen, Ph.D., Professor of Geography and Research Associate in Biology. B.A., 1950, M.A., 1953, Ph.D., 1959, California.
Neil MacDonald, Ph.D., Research Associate. B.Sc., 1971, Ph.D., 1975, Edinburgh.
Georgia Mason, M.S., Honorary Curator of the Herbarium. B.A., 1941, Montclair State (N.J.) ; M.S., 1960, Oregon State.
Laura Mehren, B.A., Research Assistant. B.A., 1974, Pomona.
Jadwiga Molè-Bajer, D.Sc., Research
Associate. M.Sc., 1950, Ph.D., 1956,
D.Sc., 1962, Jagellonian University, Poland.
Joyce Oren, Ph.D., Research Associate. A.B., University of Chicago, 1956; Ph.D., Oregon, 1971.
Zdenka Pospisil, Research Assistant.
Douglas M. Sears, M.A., Research Assistant. B.A., Pomona College, 1967 ; M.A., Oregon, 1969.

Stanley K. Sessions, B.A., Research Assistant. B.A., Oregon, 1975.
Nora Terwilliger, M.S., Research Assistant. B.S., Vermont, 1963 ; M.S., Wisconsin, 1965.
George B. Van Schaack, Ph.D., Research Associate; Honorary Curator of Herbarium. B.A., 1929, M.A., 1932, Ph.D., 1935, Harvard.
David Voegtlin, Ph.D., Research Associate. B.S., 1966, Eastern Mennonite College; M.S., 1968, Madison College; Ph.D., 1976, California, Berkeley.

Melissa Willams, B.S., Research Assistant. B.S., 1974, Oregon.
Doris R. Winber, M.A., Research Assistant. B.A., Manchester College, 1955 ; M.A., Claremont Graduate School, 1958.

## Undergraduate Studies

The Department of Biology offers an mindergraduate program planned to provide an understanding of the living world as a part of a liberal education, to prepare students for professional careers in industry, government, and secondary education, and to provide preparation for graduate work leading to careers in higher education, research, and the medical sciences.

In meeting an objective to provide courses of interest to students in the Liberal Arts, there is offered a series of courses numbered Bi 101-107 and Bi 212-272. These courses need not be taken in sequence, there are no prerequisites, and they are not primarily for biology majors. Each course is complete in itself, and is devoted to a special interest or topic within biology. The content varies from term to term, as indicated in the course descriptions.

Modern biology is a quantitative science ; students planning to specialize in biology should include in their highschool preparation as much mathematics as possible, including at least algebra and geometry. Preparation in English is essential, and work in French or German, chemistry, and physics is highly desirable.

## Major Requirements

A major in biology leads to the Bachelor of Science degree in Biology or to the Bachelor of Arts degree in Biology, with completion of appropriate literature and language requirements. The specific courses required for a major in biology are:

General Chemistry (Cl 104, 105, 106 or $\mathrm{Ch} 204,205,206$ ) three credit hours each term ; Introductory Chemistry Laboratory ( Ch 107 ) two credit hours : Introductory Analytical Chemistry ( $\mathrm{Ch} 108,109$ ) two credit hours each term ; Mathematics to include either Calculus (Mth 201) or Calculus for the Nonphysical Sciences (Mth 207) four credit hours (students without a previous course in trigonometry will be required to take Mth 102 , Elementary Functions, as a prerequisite for General Physics) ; General Physics ( $\mathrm{Ph} 201,202,203$ ) four credit hours each term ; Organic Chemistry (Ch 331, 332) three credit hours each term; Physiology and Diversity ( Bi 301 ) five
credit hours; Cell Physiology (Bi 302) five credit hours; Plant Diversity and Physiology ( Bi 303 ) five credit hours; Molecular Genetics (Bi 304) five credit hours; Gene Action and Development (Bi 305) five credit hours ; Animal Physiology (Bi 306) five credit hours; Evolution and Ecology (Bi 307) four credit hours; two additional terms of 400-level electives in biology of at least 3 credit hours each. The 400 -level electives in biology must be formal courses numbered 410 through 499 (or 510-599) unless substitutions have been approved in advance by the Department Head.

The courses, Animal Diversity ( Bi 301), Cell Physiology (Bi 302), Plant Diversity and Physiology ( Bi 303 ), Molecular Genetics ( Bi 304 ), Gene Action and Development ( Bi 305 ), Animal Physiology (Bi 306) and Evolution and Ecology (Bi 307), constitute a core curriculum in biology that conveys a body of information and thought essential to an understanding of modern biology regardless of the student's area of subsequent specialization. For certain students, specified 400level courses in chemistry or psychology may be accepted in place of the required 400 -level electives in biology. Because of the growing interest in an applicability of digital computers in modern biology, at least an elementary course in computer science in highly recommended for biology majors. Students who intend to enter graduate work are urged to include a full year of calculus and two years of French, German, or Russian in their programs.

The recommended program for biology majors includes mathematics and general chemistry in the freshman year, but not biology; organic chemistry, Animal Diversity, Cell Physiology, and Plant Diversity and Physiology in the sophomore year; Molecular genetics, Gene Action and Development, and Animal Physiology in the junior year,
with general physics ; and Evolution and Ecology with the two 400-level Biology electives in the senior year. Students with minimal or no science backgrounds may take 100 - or 200 -level courses in biology in the freshman year, but these courses do not meet major requirements.

Any course required for the biology major may be taken on a passundifferentiated basis, at the option of the student, within the limitation of the general University requirement of 90 pass-differentiated hours for the bachelor degree. Students are advised to exercise the pass-undifferentiated option sparingly or not at all if they plan to attend medical school, dental school, or to take graduate work in biology.

## Transfer Students

Students transferring in as biology majors following two years of college work elsewhere should have completed a year of general chemistry with laboratory, a year of college-level mathematics, and a year of college physics. Such students need not include biology courses in their first two years of study.

## Second Baccalaureate Degree

For students wanting to obtain a second baccalaureate degree in biology after having been awarded a baccalaureate degree in another field, the Department of Biology requires that the work includes twenty credit hours of graded upper-division work completed in biology in this department subsequent to the completion of work for the prior degree.

## Professional Students

Premedical, predental and premedical technology students who wish to major in biology should plan to complete the biology major requirements; such preprofessional students should consult
with their biology advisers regarding course scheduling for the bachelordegree program in biology, and for completion of medical school entrance requirements. Further information regarding medical school requirements and admission procedures will be found on page 164 ; inquiries may be addressed to Adviser for Premedicine, Department of Biology. Although Organic Chemistry ( Ch 333 ), Organic Chemistry Laboratory ( $\mathrm{Ch}_{3} 337,338$ ) and Physics Laboratory ( $\mathrm{Ph} 204,205$, 206) are not required for the biology major, they are required by most medical schools, including the University of Oregon Health Sciences Center. Biology majors who plan to enter medical or dental school for their senior year may use courses in anatomy and physiology taken in professional school as substitutes for the two terms of 400level electives, and Evolution and Ecology ( Bi 307 ).

## Secondary School Teaching

Certification as a teacher of science in Oregon public junior or senior high schools requires satisfactory completion of a program of teacher education which includes subject matter preparation in the sciences and in professional education, plus the recommendation of the institution in which the preparation is completed. The Department of Biology offers work leading toward an Oregon teaching endorsement in biology at the Basic and Standard certification levels, as determined by the Oregon Teacher Standards and Practices Commission. The University's programs to prepare science teachers are subject to revision to meet changes in certification requirement mandated by the Commission effective January 1, 1980. For specific information regarding requirements for one of the biology teaching endorsements, students should see the Biology departmental endorsement adviser for teacher education, and the Office

Sample programs for the first two years of study are shown below to provide an idea of an "average" student course-load.


* Note : Individual programs may vary according to each student's placement scores, interest and course work-load capacity.
of Secondary Education in the College of Education.

Students who have not previously attended the University of Oregon, but otherwise meet requirements for certification (either the basic or the Stanclard), will be required to complete one term as a full-time student, and two 400level Biology courses of at least 3 credit hours each.

## Careers and Employment

Career opportunities exist for graduates in biology with a variety of federal, state, and local government agencies, with various nomprofit organizations, in private industry, in teaching, and in self-employment. With a baccalaureate degree, persons can qualify for positions involving inspection and testing, production and operation work, teclinical sales and service, and administrative duties in comection with the enforcement of government regulations. They may also obtain positions such as senior technicians, particularly in the area of medical biology. Those who graduate near the top of their class may have opportunities to do research, although mostly of a routine nature or under close supervision.

## Special Opportunities for Biology IIndergraduates

Students majoring in biology may take advantage of one of a number of opportunities for research, seminars and other meetings, access to examination files, or part-time employment.

Students majoring in biology may elect to become involved in research through arrangement with a member of the biology department faculty. Such research is usually best carried out during the junior or senior year, and credit may be earned by enrolling in Bi 401, Bi 406 , or Bi 408 . Undergraduate students with special interest and demonstrated aptitude may apply for acceptance in the Undergraduate Research Participation program sponsored by the Department of Biology. This program enables the student to carry on researcla during the year uncler the direction of a research scientist in any of a number of fields of biology. Specific information regarding this program is available through the biology department office.

Interested students are invited to attend the Biology Seminars held most Thursday or Friday afternoons and occasionally at other times. They are announced by posters on the bulletin boards.

Students are encouraged to express ideas and to offer suggestions regarding curriculum, student relations, and
aspects of administration directly to the head of the biology department. It is hoped that providing this opportunity will promote the clialogue necessary to keep the department informed about student needs and interests. In this way the department expects to establish a sound basis for curricular and administrative policies required to meet clanging times and new situations. Undergraduate majors in biology are represented on committees whose work and deliberations affect directly the undergraduate major progran. Students interested in working on such committees should make their interest known to the department head.

The Department of Biology maintains a file of past exams given in biology courses during previous years. Most of these files have been deposited either in the biology office or in the Reserve Book Room of the main Library, where they may be used for study by interested students.

Opportunities exist for students majoring in biology to arrange to assist in the teaching of laboratory sections of some biology courses. These assistantships are linited in number but applications may be filed with the department by any student majoring in biology. Prevailing wages for such assistantships range from $\$ 3.73$ to $\$ 4.75$ per hour.

## Graduate Stuclies

Facilities are available for graduate study in most of the basic science areas of botany and zoology, including cytology, development, ecology, genetics, marine biology, microbiology, morphology, neurobiology, physiology (comparative, general mammalian, and plant), and systematics. Interdisciplinary programs are offered in developmental biology, neurobiology, and molecular biology, involving the three Departments of Biology, Chemistry, and Psychology, as well as the Institute of Molecular Biology.

## Degrees

The department offers graduate work leading to the Doctor of Philosophy degree, and to the degrees of Master of Arts and Master of Science for students primarily interested in teaching careers in the high schools and junior colleges. The department will continue to grant master's degrees en passant to Ph.D. candidates, if they wish, and as terminal degrees to other Ph.D. candidates who for any reason are not continuing for the Ph.D. degree. Candiclates for higher degrees are
expected to meet the equivalent of the University undergraduate major requirements before advancement to candidacy for the degree.

## Admission

Requirements for admission to a master's program are:
(1) A completed application for admission form; (2) three letters of recommendation ; (3) transcripts of all college work; (4) scores on the Graduate Record Examination ; (5) TOEFL scores for foreign students.

Application forms, reference forms and additional information may be obtained from the department office. Completed application forms, copies of college transcripts, and letters of reference are to be sent to the Department of Biology in care of the Graduate Secretary. Copies of official transcripts of all college work must be orderèd to be sent directly to the Department of Biology. Deadline for applications is February 15.

The graduate progran leading to the Doctor of Philosophy degree in biology requires the same procedure of application for admission as described above for a master's program.

## Institute of Marine Biology

The University operates the Oregon Institute of Marine Biology at Charleston on Coos Bay. The Institute is located in a setting providing access to an unusual variety of richly populated marine and terrestrial habitats. A full program of undergraduate and graduate studies is offered during the summer session. On an experimental basis, an organized instructional program is being offered during fall term, including undergraduate and graduate courses. The research facilities are available throughout the year.

## Institute of Molecular Biology

A program of research and research instruction in areas of biology where phenomena can be understood in terms of the structure of molecules is conducted through the Institute of Molecular Biology. For further information, see Institute of Molecular Biology, page 26 ; or direct inquiries to the Director.

## Biosocial Research Center

The Departments of Biology, Anthropology, and Psychology support a multi-disciplinary facility devoted to research into the substrates of behavior, including ethological, neurological, and developmental factors. The center is situated on 2.5 acres near the science
complex. It contains 4,000 square feet of laboratory and conference space, including facilities for maintaining colonies of mice, behavioral laboratories, observation areas, controlled temperature rooms, and a modern surgery. There are, in addition, outside enclosures for larger animals.

## Herbarium

The University of Oregon Herbarium was established near the turn of the century and soon thereafter became repository for the original collections of most of Oregon's resident pioneer botanists. Current holdings are in excess of 100,000 prepared specimens, mostly vascular plants, including ca. 600 types. The herbarium provides clemonstration material for classroom use, offers identification service for the general public, and maintains facilities for research in systematic botany and accessory services for research in ecology-related fields. For further information, contact the Curator.

## Undergraduate Courses

The lower-division courses in Biology, described immediately below, are designed primarily to meet general liberal arts requirements in science.

Bi 101. Selected Topics in Bology. 3 credit hours. Subjects of general interest covering the role of biology in modern life, with emphasis on the elementary biological principles necessary for an understanding of current problems. Content will vary from term to term with topics to include biology, ethics and society; animal behavior ; developmental biology; molecular biology; cancer biology ; and other topics of current interest. May be repeated for credit with different subtitles.
Bi 102. Selected Topics in Animal Biology. 4 credit hours. Basic information regarding yarious aspects of the biology of animal life, including the human organism. Specific content will vary from term to term with topics to include human blood, the nervous system, fishes as a natural resource, and others of current interest. Lectures plus laboratory, demonstration, or discussion. May be repeated for credit with different subtitles.
Bi 104. Selected Topics in Plant Biology.
4 credit hours. Aspects of the biology of plant life and plant cells, including lower plants and seed plants. Specific content may vary from term to term with topics to include introductory plant science, our mouldy earth, flowering plants, and others of current interest.
Lectures and laboratory, demonstration, or discussion. May be repeated for credit with different subtitles.
Bi 105. The Physical Basis of Life. 4 credit hours. The study of those aspects of growth, reproduction, and heredity that are common to all living things. Explanations will be phrased in terms of experimental observations and will be at the level of the molecules that
play important roles in living systems. Lectures and discussion or laboratory.
Bi 106. Principles of Evolution. 4 credit hours. The elementary biological principles involved in the development of diverse life forms, illustrated by examples from selected animals and plants. Lectures, demonstration or discussion.
Bi 107. Selected Topics in Natural History. 4 credit hours. Organisms and their natural environments. Separate terms will include the marine environment, the freshwater environment, and varied terrestrial systems. Topics will include marine biology, social insects, 11atural history of birds, and others of current interest. Lectures, demonstrations, and field trips. May be repeated for credit with different subtitles.
Bi 199. Special Studies. 1-2 credit hours. Bi 200. SEARCH. 1-2 credit hours. No-grade course.
Bi 212. Photobiology. 4 credit hours.
Introduction to the biological actions of light on plants and animals. Emphasis on photosynthesis and vision, but other topics such as sunburn, phototropism, photoperiodism, and bioluminescence are also discussed. The biological examples are unified by the principles underlying the absorption of light by pigments and its conversion into chemical energy. Evolutionary adaptations of organisms are considered in relation to the light available in their environments. This course is designed for majors in areas other than biology. Munz.
Bi 222 . Genetics and Man. 3 credit hours.
Basic concepts of genetics, especially as they relate to man, and a discussion of related topics such as blood group immunology, medicolegal problems, transplantation and the immune reaction, prenatal effects, genetic effects of radiation, the biology of twinning, selection in man and sociological implications of genetic findings. Novitski,
Bi 232. The Biology of Common and Useful Plants. 4 credit hours. Survey of the origin, culture, and biology of the major groups of plants of importance to man, and a discussion of basic requirements for plant growth, principles of plant breeding and genetics, plant morphology, plant viruses, fungal diseases, herbicides and pesticides, weeds, alkaloids and drugs, soils and systems of agriculture, organic gardening, conservation of natural plant communities. This course is intended for students majoring in areas other than biology, and is not recommended for biology majors. Hague.
Pi 242. Paleobiology and Evolution of Plants. 4 credit hours. Survey of major trends in the evolution, ecology, and distribution of the world's plants through geologic time based on the fossil record and interrelated with the geologic history of the earth. Consideration of the origin, development, and interrelations of major groups of plants, as well as morphological levels of increasing complexity and specialization in plants through time, and the imperfections of the fossil record in documenting the course of plant evolution. Lectures, laboratory, or discussion. Gray. Offered 1978-79 and alternate years.
Bi 272. Introduction to Ecology. 3 credit hours. The energetics of organisms : the extent and efficiency of energy capture in human, plant and animal nutrition; the cycling of nutrient materials; ecological succession; population growth; species interrelations and meaning of species diversity. This course is designed for students majoring in areas other than biology, and is not recommended for biology majors. Cook, Frank, Udovic.

## Upper-Division Courses

Note: Bi 301-307 described immediately below constitute the core program for students majoring in biology.

## Bi 301. Animal Diversity. 5 credit hours

 fall term. A presentation of the basic features of the anatomy and physiology of representatives of important groups of invertebrate and vertebrate animals. Three lectures, one laboratory/discussion period. Prerequisites: one year of General Chemistry ; Organic Chemistry and college mathematics, or must be taken concurrently.Bi 302. Cell Physiology. 3-5 credit hours winter term. An examination of the structural and biochemical unity of cells which underlies the diversity of plants and animals. Topics include : cellular architecture, structure of proteins, enzyme action, structure of cellular membranes, energy metabolism, biosynthetic pathways, and control of cellular metabolism. Three lectures, one laboratory/discussion period. Prerequisites: one year of General Chemistry; Organic Chemistry and college mathematics or must be taken concurrently.
Bi 303. Plant Diversity and Physiology. 5 credit hours spring term. Integrated study of the structure, development, and physiology of representatives of the important plant phyla, including adaptations essential for colonization and survival in various aquatic and terrestrial environments. Three lectures, one laboratory/discussion period. Prerequisites one year of General Chemistry ; Organic Chemistry and college mathematics are prerequisite or must be taken concurrently. Bi 304. Molecular Genetics. 3-5 credit hours fall term. An examination of the biologically fundamental processes of reproduction and variation at the molecular level. Experiments leading to our present views are described. Topics are the chemical structure of the genic material, the mechanisms of gene duplication, mutation, and recombination, and the formal relationships between genes and their protein products. Students taking this course should plan to take Bi 305 in the following term; Bi 304 and 305 are precisely dovetailed in their presentation of the biochemical and genetic basis of cellular activities. Three lectures, one laboratory/discussion period. Prerequisites: either Organic Chemistry and one year of college mathematics, or one year of General Chemistry and one year of General Physics.

## Bi 305 . Gene Action and Development.

$3-5$ credit hours winter term. How the genetic information is utilized to direct cellular and organismal development. Particular topics include control of protein synthesis and enzyme activity, macromolecular architecture and organelle assembly, and aspects of animal development (embryogenesis, cell determination and differentiation, patterning). Three lectures, one laboratory/ discussion period. Prerequisite : Bi 304. Bi 306. Animal Physiology. 3-5 credit hours spring term. Elementary neurophysiology and muscle contraction. Homeostatic mechanisms of circulation, respiration, metabolism, ionic regulation and excretion are described in mammals and compared with those in other animals. Three lectures, one laboratory/discussion period. Prerequisite: Bi 305 or equivalent.

## Bi 307. Evolution and Ecology. 4 credit

hours. The relationship of organisms to their environment in space and time: the evolution of species and populations, factors controlling the distribution and abundance of organisms, and community and systems ecology. Three lectures per week and three all-day Saturday or Sunday field trips per term.

Note: The 300-level courses described immediately below are designed primarily for students other than biology majors.
Bi 321, 322. Human Physiology. 3 credit hours each term. Required for majors in health education and physical education, elective for others. Prerequisite : one year of college chemistry and one year of college biology. Soderwall.
Bi 360 . Coastal Biology. 4 credit hours. Introduces students to a wide range of environments on the Oregon Coast: the open ocean, rocky intertidal, sand beach, and estuarine environments demonstrate basic biological principles through a comparative study of these coastal environments. Three lectures, one four-hour laboratory per week. Prerequisite : one year of Biology core or equivalent. Limited to 10 students.
Bi 370. The Human Environment. 3 credit hours. An analysis of the human-environmental relationship. Consideration of behavior-guiding world views both as determinants of how humans treat the world, and as responses to how it treats them; illustrated by case histories. Contrast of materialist-objectivist and sensual-subjectivist views, evaluation of scientific humanism. Open to students in any field seeking holistic understanding of current adaptational problems. Cook. (A complementary course is offered by the Geology Department under the title Mineral Resources and the Environment, Geol 321. This course deals with the use of minerals and energy and the relation of their use to the environment.)
Bi 376. Natural History of Oregon. 4 credit hours. Plants and animals of Oregon; their identification and factors relating to their occurrence, distribution and abundance. Intended primarily for prospective teachers planning to teach in Oregon. Murphy. Offered Summer Sessions only.
Bi 381. Introduction to Bacteriology. 3 credit hours. Basic principles and techniques of bacteriology; role of bacteria and other micro-organisms in transformations of organic matter and in physical and chemical transformations in soil and water; their importance to man. Three lectures. Prerequisite : general chemistry. McConnaughey.

## Bi 383. Introduction to Bacteriology

Laboratory. 2 credit hours. Basic techniques in the culturing, microscopic examination, and characterization of micro-organisms. Prerequisite: either concurrent or prior enrollment in Bi 381 or consent of instructor.

## McConnaughey.

Bi 391, 392. Human Anatomy. 3 credit hours each term. Gross anatomy ; the skeletal, muscular, and neural systems; the circulatory, respiratory, digestive, and urogenital systems. Two lectures ; one two-hour laboratory period. Prerequisite : one year of college biology or equivalent or consent of instructor.

Note: The 400-level courses described immediately below are designed primarily for undergraduate majors in biology.
Bi 401. Research. Credit hours to be arranged. No-grade course.
Bi 403. Thesis. Credit hours to be arranged. No-grade course.
Bi 405. Reading and Conference. Credit hours to be arranged. No-grade course. Bi 407. Seminar. Credit hours to be arranged. No-grade course.
Bi 409. Practicum. 1-3 credit hours any term. No-grade course.

## Upper-Division Courses Carrying Graduate Credit

Bi 406. Field Studies. (G) Credit hours to be arranged.
Bi 407. Seminar. (G) Credit hours to be arranged. No-grade course.
Bi 408. Laboratory Projects. (G) Credit hours to be arranged. Special laboratory training in research methods.
Bi 410. Experimental Course. (G) Credit hours to be arranged.
Bi 413. Comparative Physiology. (G) 4-12
credit hours. Lectures, demonstrations, and laboratory experiments with emphasis on respiration, osmoregulation and excretion, nerve and muscle physiology of major animal groups. Prerequisite: cell biology ; or general physiology, organic chemistry, and college zoology ; or consent of instructor. Offered at Oregon Institute of Marine Biology.
Bi 414, 415. General and Comparative Physiology. (G) 4 hours each term. First term : study of homeostatic mechanisms in the areas of ionic and osmotic regulation, excretion, circulation, respiration, metabolism, and body-temperature regulation. Second term: physiology of excitation, conduction, synaptic transmission, muscular contraction, sensory transduction, and reflex action in animals. Two lectures, six hours of laboratory-discussion. Consent of instructor is required. Prerequisite: general physics, Bi 301 through Bi 306 or equivalent. Munz, Hoyle.
Bi 416. Comparative Neurobiology. (G) 4
credit hours. Continuation of material introduced in Bi 415 with particular emphasis on neural integration, sense organs, and brain function. Two lectures, two three-hour laboratories per week. Hoyle.
Bi 417. Biological Clocks. (G) 4 credit
hours. The physiology and ecology of biological clocks with emphasis on circadian rhythms, thermoperiodism, photoperiodism, and seasonal development. Consideration will also be given to the ontogeny of periodic behavior, sun-compass orientation, migration, and tidal, lunar, and annual rhythms. Two lectures and two laboratory discussions. Prerequisite : Bi 301, 302, 303. Bradshaw. Offered alternate years. Not available 1978-79.
Bi 422. Genetics. (G) 3 credit hours.
A study of the transmission and regulation of the hereditary material in eucaryotic organisms including sex determination, genome structure and change, developmental genetics. Prerequisite: Bi 304 or equivalent, or consent of instructor. Sederoff.
Bi 423. Genetics Laboratory. (G) 2 credit hours. An experimental approach to the transmission and regulation of the hereditary material in eucaryotes, using Drosophila, including population genetics, biochemical genetics, and developmental genetics. Sederoff.
Bi 424. Human Genetics. (G) 3 credit
hours. The immunogenetics of the blood groups and transplantation incompatibilities; sex determination and the sex ratio; spontaneous and induced mutation; radiation effects; the genetics of populations; selection, eugenics, and medical aspects of genetic disease. Three lectures. Prerequisite: previous course in genetics or consent of instructor. Novitski.
Bi 428. Cell Organelles. (G) 3 credit hours. Stress on the fine structure of the motile organelles and cell division. Transport within the cell: endoplasmic reticulum, Golgi complex, lysosomes. Microtubules and micro-
filaments and their role in movement. Fine structure of the spindle and mechanism of chromosome movements. Review of selected techniques and tools in ultrastructural studies. Bajer.

## Bi 429. Nuclear Cytology. (G) 4 credit

hours. Structure and function of the nucleus.
Behavior of chromosomes; elementary cytogenetics ; methods of study and experimental procedures. Two lectures, two threehour laboratory periods. Consent of instructor is required. Wimber.
Bi 432. Mycology. (G) 5 credit hours. Physiology, ecology structure, and classification of the fungi; emphasis on structural and physiological adaptations to saproplytic, parasitic and symbiotic modes of existence. Three lectures, two three-hour laboratory periods. Prerequisite: Bi 301, 302, 303, or Bi 304, 305,306 or equivalent, or consent of instructor, Offered alternate years: not available 1978-79. Carroll.
Bi 433. Algae. (G) 5 credit hours. Structure, cytology, life history, and ecology of representative fresh-water and marine algae. Three lectures; two three-hour laboratory periods. Consent of instructor is required. Offered 1978-79 and alternate years. Castenholz.
Bi 435. Methods of Pollen Analysis. (G) 4 credit hours. A lecture-laboratory course concerned with the morphology of pollen, technicues of collection and preparation of pollen for study, and methods of pollen analysis. Two four-hour combined lecture and laboratory meetings each week. Consent of instructor is required. Gray.
Bi 438. Systematic Botany. (G) 5 credit
hours. Principles of plant classification ; introduction to taxonomic theory and methods of biosystematics ; collection and' identification procedures; recognition of common families in native flora. Wagner.
Bi 439. Field Botany. (G) 4 credit hours.
Field study and identification of the flora of Northwest Oregon. Vascular plants will be emphasized, but the algae, fungi, and mosses will be considerd as they are met in the field. Recognition of diverse plant communities; utilization of materials for laboratory teaching. Prerequisite : one year of biology or consent of instructor. Offered in Summer Session only.

## Bi 440. Morphology of Vascular Plants.

(G) 5 credit hours. Comparative study of the structure, life history, and evolution of representatives of the ferns, fern allies, and seed plants. Three lectures; two three-hour laboratory periods. Prerequisite: Bi 303, or consent of instructor. Tepfer.
Bi 441. Plant Physiology. (G) 3 credit
hours. Physiology and biochemistry of
vascular plants, including nucleic acid and protein synthesis, photochemical reactions of photosynthesis, photomorphogenesis, water relations, ion uptake, and transport of organic molecules. Three lectures. Prerequisite: Bi 303, or consent of instructor. Hague.
Bi 442. Plant Morphogenesis. (G) 3 credit hours. Structure and development of cells, tissues, and organs, including discussion of the mechanism of action and metabolism of plant growth substances and control mechanisms in growth and differentiation. Three lectures. Prerequisite: Bi 303, or consent of instructor. Bonnett.
Psy 442. Animal Behavior. (G) 3 credit hours. May be taken for credit toward a biology major. Survey of ethology plus its relation to experimental psychology and the biological sciences. Areas include: evolutionary and comparative aspects of animal behavior, interactions between motivational
systems, neuro-behavioral development. Prerequisite: upper-division work in psychology or biology. Fernald.
Bi 443. Plant Physiology Laboratory. (G)
2 credit hours. Experience in analysis of basic physiological processes of plant function. Offered 1978-79 and alternate years.
Bi 444. Plant Morphogenesis Laboratory. (G) 2 credit hours. Laboratory analysis of the experimental foundations for hormonal regulations of plant growth and development. Offered alternate years; not available 1978-79.
Bi 451, 452. Developmental Biology. (G)
3 credit hours each term. An examination of selected topics in developmental biology, including genetic regulation, nucleocytoplasmic interactions, organellogenesis. morphogenesis, pattern formation, cell differentiation, developmental neurobiology, and neoplasia. Prerequisite: Bi 305 or equivalent, of consent of instructor. Grant, Kimmel, Postlethwait, Weston.

## Bi 453, 454. Developmental Biology

Laboratory. (G) 2 credit hours each term. Experience in the analysis of developing systems, with emphasis on cell and tissue culture methods in the study of differentiation, cellular interactions and morphogenesis. Discussion plus laboratory. Consent of instructor is required. Grant, Kimmel, Weston.

## Bi 455. Histology. (G) 4 credit hours.

 Functionally oriented study of microscopic anatomy of vertebrate tissue and organs. Two lectures; two three-hour laboratory periods. Consent of instructor is required; $\mathrm{Bi} 301-306$ or equivalent strongly recommended.Bi 458. Marine Birds and Mammals. (G)
4 credit hours. An introduction of some general principles of ecology, ethology, and systematics as demonstrated through study of birds and mammals of the Oregon coast. Intensive study of the comparative faunas from the open sea to the inland dry communities. Prerequisite: introductory biology course. Offered at Oregon Institute of Marine Biology.
Bi 459. Field Ornithology. (G) 3 credit hours. Natural history and identification of birds involving field work and supporting laboratory activities. Study will include aspects of structural adaptation, behavior, distribution, migration and ecology. Consideration of the relationship of human activities to breeding success of birds. Of special value to teachers. Offered Summer Session only.
Bi 461. Invertebrate Zoology. (G) 5 or 8 credit hours. Survey of representative invertebrate groups, with emphasis on marine forms; morphology, systematics, life history, and ecology. Offered at Oregon Institute of Marine Biology for 8 credits and on Eugene campus for 5 credits. Consent of instructor is reguired.
Bi 462. Biology of Insects. (G) 4 credit hours. The anatomy and physiology of typical insects. A survey of the major orders of insects introduces the student to the wide variety of morphological types and remarkable physiological and behavioral adaptations to the environment. Insect societies discussed in some detail. Three lectures, one four-hour laboratory per week Prerequisite: one year of the Biology Core or equivalent. Not offered 1978-79.
Ch 461, 462, 463. Biochemistry. (G) 4 credit hours each term. Emphasis on the structure and functions of biological macromolecules, metabolism and metabolic control processes, protein and nucleic acid synthesis, and biological genetics. Prerequisite: $\mathrm{Ch} 331,332,333$, or their equivalents. Some prior exposure to
calculus and physical chemistry helpful but not required. May be taken for credit toward a biology major.
Bi 463. Parasitology. (G) 4 credit hours.
Survey of important parasitic groups. Biological relationships of parasite and host, and the effect of such relationships on each. Two lectures; two three-hour laboratory periods. Offered 1978-79 and alternate years. Prerequisite: $\mathrm{Bi} 301,302,303$ or equivalent, or consent of instructor. McConnaughey.
Ch 464. Biochemistry Laboratory. (G) 4 credit hours. Designed to illustrate approaches currently being used in research in enzyme kinetics, protein purification, protein structure, nucleic acid purification, nucleic acid structure, and in the study of protein synthesis in intact cells and cell-free systems. Two four-hour laboratory periods and one to two hours of conference a week winter term. Selected students may continue with projects in the spring term under Ch 409. Consent of instructor is required,
Bi 465. Comparative Biochemistry. (G) 8 credit hours. A general experimental biochemistry course, utilizing marine organisms, with an emphasis on methods of purification of proteins and a study of protein structure and function. The biochemical properties of small molecules such as various pigments, peptides, indoles, and phosphagens are examined. Prerequisite: Bi 301, 302, 303; or general and organic chemistry, and college zoology. Offered at Oregon Institute of Marine Biology. Terwilliger.
Bi 469. Experimental Invertebrate Embryology. (G) 5 or 8 credit hours. Lecture and laboratory dealing with modes of development of the major invertebrate groups, the identification of common larval forms, the methods utilized in obtaining and rearing embryos and larvae of marine animals and the methods used in the execution of fundamental experiments for the analysis of development. Offered at Oregon Institute of Marine Biology for 8 credits, on Eugene campus for 5 credits. Prerequisite: Invertebrate zoology. Consent of instructor is required.
Bi 470. Dynamic Systems in Biology. (G) 4 credit hours. Formulation, construction, testing, interpretation, and evaluation of biological models. Participants will be guided in the writing of simulation programs and use of digital computer as an aid in studying groups of disparate biological systems ranging from ecological systems to cellular ones. No prior knowledge of computers is required. Prerequisite: Calculus, Bi 301, 302, 303, or equivalent ; senior standing in Riology. Consent of instructor is required. CS 133 is recommended. Wiitanen.
Bi 471. Population Biology I. (G) 4 credit hours. Part I of the ecology and evolution sequence; an integrated sequence for students specializin in ecology, population biology, or related fields. Growth, structure and regulation of natural populations. Population genetics. Natural selection. Origin and regulation of genetic variability. Three lectures, one discussion session. Two or three weekend field trips. Consent of instructor is required. Background in genetics and mathematics is essential. Offered fall term. Udovic.
Bi 472. Population Biology II. (G) 5 credit hours. Part II of the ecology and evolution sequence. Geographic variation; the species concept; theories of species formation. The demographic and evolutionary consequences of competition, predation and mutualism. Adaptive significance of life-history attributes. Three lectures, one discussion session. One or two weekend field trips. Consent of
instructor is required. Prerequisite: Bi 471, or Bi 307 plus background in genetics or consent of instructor. Offered winter term. Udovic, Frank.
Bi 473. Biological Communities. (G) 5 credit hours. Part III of the ecology-andevolution sequence. The theory and measurement of community structure, diversity, and stability. Three lectures, field work. Consent of instructor is required. Bi 472 is strongly recommended. Offered spring term. Frank.
Bi 474. Terrestrial Ecosystems. (G) 5 credit hours. Part IV of the ecology-andevolution sequence. The interaction between terrestrial communities and their physical environment. Energy flow and energetics. Mineral cycling. Succession. Three lectures, field work. Consent of instructor is required. Bi 473 is strongly recommended. (Those intterested in aquatic ecosystems are referred to Bi 475.) Offered fall term. Cook.

## Bi 475. Limnology. (G) 5 credit hours.

A study of fresh water environments, particularly those of lakes. Chemical, physical and biological interactions. Three lectures, two laboratory-field periods. Consent of instructor is required. Castenholz.
Bi 476. Quantitative Field Ecology. (G) 5 credit hours. Extensive study and learning experience in the field. Poses questions which can be more clearly defined or answered by gathering quantitative data in nature and on the reduction and manipulation of one's own field data. Six overnight (weekend) field trips; one discussion per week; no formal lectures or examinations, but up to six research reports will be required. Prerequisites: an upper-division course in ecology. Offered 1978-79 and alternate spring terms.
Bi 478. Marine Ecology. (G) 4 or 8 credit hours. An examination of the characteristics of marine and estuarine habitats and organisms, with emphasis on primary and secondary productivitiy, and on community structure and dynamics. Field emphasis will be on local intertidal and shallow-water communities; an independent field research project is required. Prerequisite: Invertebrate Zoology or Algae or both; statistics and calculus desirable. Offered at Oregon Institute of Marine Biology.
Bi 479. The Marine Environment. (G) 4-8 credit hours. An introduction to the biota, life zones, and populations of the open ocean. Descriptions of currents, water masses, the chemistry of sea water, and their relationship to the biology of the oceans. An analysis of concepts and theories used to explain biological events observed in the ocean. Offered at the Institute of Marine Biology.

## Bi 481, 482. Biology of Prokaryotic

Organisms. (G) 3 credit hours each term. Bi 481: Biology of photosynthetic prokaryotic organisms, including structure, physiology, genetics, and natural history of the blue-green algae and photosynthetic bacteria. Three hours of lecture per week. Consent of instructor is required. Offered alternate years. Not available 1978-79. Castenholz and Sistrom. Bi 482 : Biology of bacteria, including structure, physiology, genetics, and natural history. Major emphasis on nonphotosynthetic bacteria. Three hours of lecture per week. Consent of instructor is required. Offered 1978-79 and alternate years. Sistrom and Casterholz.
Bi 483, 484. Biology of Prokaryotic Organisms Laboratory. (G) 2 credit hours each term. Bi 483: Isolation of diverse blue-green algae and photosynthetic bacteria from nature. As time permits, the physiology of selected organisms will be examined in more detail.

Enrollment limited to 14 . Consent of instructor is required. Offered alternate years, concurrently with Bi 481 . Not available 1978-79. Castenholz and Sistrom. Bi 484 : Isolation of diverse bacteria from nature. As time permits, the plyysiology of selected organisms will be examined in more detail. Enrollment linited to 14. Consent of instructor is reguired. Offered 1978-79 and alternate years, concurrently with Bi 482 . Sistrom and Castenholz.
Bi 485. Microbial Ecology. (G) 3 credit hours. Biology and interactions of protists in soil, fresh water, and the sea. Emphasis on roles played in geo-chenical cycles, interactions with each other and with other groups of organisms. Eucaryotic as well as prokaryotic organisms will be considered. The laboratory work will emphasize eucaryotic organisms. Consent of instructor is required. Prerequisite: Bi 381 or equivalent, or consent of instructor. Offered alternate years; not available 1978-79. McConnaughey.
Bi 486. Microbial Ecology Laboratory. (G) 2 credit hours. Isolation, culture, and identification of eucaryotic protists. Prerequisite : concurrent enrollment in Bi 485. Limited to twenty students. Offered alternate years; not available 1978-79. McConnaughey.
Bi 487. Advanced Molecular Genetics. (G) 3 credit hours. Growth, mutation, recombination, and regulation of DNA, RNA, and protein synthesis in phage, bacteria, and lower eukaryotes. Lectures and discussion. Prerequisite: Bi 304 and Bi 305 , or equivalent, or consent of instructor. Herskowitz, Smith, Stahl.

## Bi 489. Membrane Structure and Function.

 (G) 3 credit hours. Chemical composition and molecular structure of biological membranes, with particular reference to mitochondrial and erythrocyte membranes. Functions of membranes including transport, cell-cell recognition and interaction, energy transduction, hormone action. Two lectures and conference. Capaldi.Bi 491, 492, 493. Historical Biogeography.
(G) 3 credit hours each term. Fall : classification of mammals and mammalian morphology, with emphasis on comparative osteology. Winter : history of mammals; principles involved in their chronological distribution. Spring: biogeography and paleoecology. Two lectures; one three-hour laboratory period. Prerequisite: senior standing in biology, geology, or anthropology. Not offered 1978-79.

## Ph 491. X-ray Crystallography. (G) 4

 credit hours. X-ray diffraction. Bragg's law, crystal symmetry, the reciprocal lattice, structure factors and Fourier syntheses, the phase problem, methods of determining small and macromolecular crystal structures. Laboratory work includes mainipulation and alignment of crystals, taking and analysing X-ray photographs, and use of basic X-ray diffraction equipment. Three lectures, one laboratory period. Consent of instructor is required.Bi 494. Laboratory and Field Methods in Biology. (G) 4 credit hours. Designed especially for biology teachers in secondary schools. Field collection, identification and culturing of living material, utilization of this material in the biology teaching laboratory. Field trips for exploration of various kinds of habitats in the Pacific Northwest. Offered Summer Session only.
Bi 495. History of Biological Ideas. (G) 3 credit hours. Lectures, readings, and discussion of the historical origin and present status of leading biological ideas, and the contribution of biological thought to contemporary culture.

## Graduate Courses

Bi 501. Research. Credit hours to be arranged. No-grade course.
Bi 502. Supervised College Teaching. Credit hours to be arranged. No-grade course. Bi 503. Thesis. Credit hours to be arranged. No-grade course.
Bi 505. Reading and Conference. Credit hours to be arranged. No-grade course.
Bi 507. Seminar. Credit hours to be arranged.
No-grade course.
Animal Physiology.
Botany.
Cytology.
Developmental Biology.
Ecology.
Genetics.
Molecular Biology.
Ch 507. Biochemistry Seminar. 1 credit hour any term. Seminars are presented on topics of current biochemical interest by graduate students. Presentations may be of a topic from the biochemical literature or on the original research work of the speaker. Faculty members assist the students in preparing the seminar, and organized constructive criticism of presentation techniques follows. Repeated enrollment is permitted. No-grade course.
Bi 507. Genetics Seminar. 1 credit hour any
term. Topics of current interest in genetics of prokaryotes and eukaryotes are explored through readings of the original literature, reports, and discussions. Subject matter and faculty participants change each term. Visiting lecturers often are involved. Repeated enrollment is permitted. When subject matter overlaps, Genetics and Molecular Biology Seminars may be held jointly. No-grade course
Bi 507. Molecular Biology Seminar. 1 credit hour any term. Topics of current interest in the general area of molecular biology are explored through readings of the original literature, reports and discussions. Subject matter and faculty participants change each term. Visiting lecturers are often involved. Recent topics have included: Mechanisms of Transport across Membranes, Mutagenesis, DNA Synthesis, Membrane Structure, Jumping Genes, Enzyme Structure and Function, Molecular Immunology. The fall term seminar of alternate years is devoted to a rotating symposium covering the work of the various research labs working in molecular biology at the University. Repeated enrollment is permitted. Whell subject matter overlaps, Molecular Biology and Genetics Seminars may be held jointly. No-grade course.
Bi 507. Developmental Biology Seminar. 1 credit hour any term. Topics of current interest in the study of developmental processes in eukaryotes are explored through readings of the original literature, reports and discussions. Subject matter and responsible faculty change each time the seminar is offered. Repeated enrollment is permitted. No-grade course.
Bi 508. Special Topics. Credit hours to be arranged. Lecture course devoted to advanced topics, primarily in ecology and evolution. Topics reflect the curent research interests of the instructors. Some examples follow : Phenology and Seasonality Modeling. Bradshaw.
Vascular Plant Autecology. Cook.
Experimental Design in Ecology. Frank. Paleoecology. Gray.
Mathematical Modeling in Ecology and Evolution. Udovic.
Insect-Plant Interactions. Udovic.
Soil Ecology. Cook. (To be offered 1978-79.)

Bi 509. Practicum. 1-3 credit hours any term. No-grade course.
Bi 510. Experimental Course. Credit hours to be arranged.
Bi 511. Vertebrate Endocrinology. 3 credit
hours. The morphology and physiology of glands of internal secretion ; their role in normal body function of the vertebrates. Vigna.
Bi 512. Physiology of Reproduction. 3 credit hours. Biochemical, histochemical, physiological, and other experimental approaches to problems in the physiology of reproduction. Offered 1978-79. Soderwall.
Bi 513. Endocrinology Laboratory. 1-3 credit hours. Laboratory work related to Bi 511. Vigna.
Ch 513. Special Topics in Biochemistry.
3 credit hours. Repeated enrollment is permitted. Recent topics have included:
Enzyme Mechanisms. Bernhard, Wolfe. Stability and Conformation of Macromolecules. von Hippel.
Structure and Function of Nucleic Acids and Nucleic Acid Protein Complexes. von Hippel. Conformational Analysis of Macromolecules. Schellman.
Protein and Nucleic Acid Biosynthesis. Herbert.
Macromolecular Carbohydrates and Glycoproteins. Reithel.
Protein Subunit Equilibria and Self-
Assembly Problems in Biological Structures. Reithel.
Biochemical Regulation in Higher Organisms. Herbert.
X-ray Crystallography. Matthews.
Membrane Structure and Function.
Bi 514. Advanced Mammalian Neuro-
biology. 3 credit hours. Sensory inputs from the periphery are traced through successive processing stages in the central nervous system until they arrive at the cerebral cortex. Motor commands are then traced from motor cortex down through the descending pathways until the final effectors are reached. At each stage of the ascending and descending pathways, anatomy, physiology, and pathology are described. In many cases, informationprocessing models will be discussed for both ascending and descending systems. Not offered 1978-79.
Bi 515. Neurochemistry. 3 credit hours. Biochemistry specific to the nervous system with an emphasis on synaptic chemistry ; identification of neurotransmitters; metabolism, storage, release of the known transmit ters; post-synaptic events; correlation of chemical events with neuranatomy and physiology; current problems and experimental approaches. Two lectures and one hour of discussion. Consent of instructor is required. Prerequisite: Ch 461, Ch 462, Bi 415, or equivalent. Barker.
Bi 516. Neurobiological Basis of Behavior: 3 credit hours. Physiology and morphology of neuromuscular systems of animals, with emphasis on comparative development and the evolution of animal behavior. Not offered 1978-79.
Bi 517. Neurobiology Laboratory. 3 credit
hours. Laboratory work to accompany Bi 516 ; with emphasis on the electrical and anatomical techniques for study of nerve and muscle function. Not offered 1978-79.

## Bi 518. Comparative Vertebrate Nervous

Systems. 3-5 credit hours. Lectures emphasize the principles of organization of vertebrate nervous systems, with emphasis on functionally significant variations; evolution of lemniscal systems, motor control systems,
forebrain, cerebral cortex ; discussion of problems of homology in chordate nervous systems. Laboratory work, one afternoon per week, includes gross anatomy and dissection of sheep brain, and microscopic study of the brains of representative vertebrates. Consent of instructor required; basic knowledge of the anatomy of one vertebrate nervous system is prerequisite. Offered alternate years ; possibly available 1978-79.
Bi 519. Comparative Neurocytology and Neurohistology. 3 credit hours. Lectures and discussions on the contributions of classical neurohistology, contemporary electron microscony, and cytochemistry to the understanding of function in vertebrate and invertebrate nervous systems. Consent of instructor required. Not offered 1978-79.

Bi 520, 521, 522. Advanced Genetics. 2 credit hours each term. Selected topics from the following : gene action, mutation, chromo some mechanics, population genetics, statistical methods, radiation genetics. Two lectures. Consent of instructor is required. Not available iu1 1978-79. Novitski.

Bi 523, 524, 525. Principles of Microscopic Techniques. 2-5 credit hours each term. Procedures and techniques requisite for current microscopic research on biological materials. Fall: fixation, dehydration, infiltration, embedding, sectioning, and staining biological materials for examination with the light microscope; autoradiography and elementary cytochemistry. Winter: theory and application of techniques of electron microscopy, including fixation, embedding, microscope operation, negative and positive staining, metal sladowing, and freeze-etching. Spring: the light microscope on practical and theoretical levels, including bright field optics and modifications allowing for dark field, interference, polarization, phase and differential contrast microscopy; principles and practices of scientific macrophotography, microphotography, and photomicrography Wimber, Schabtach, Howard.
Bi 526. Developmental Genetics. 3 credit hours. An analysis of genetic regulation of development including investigations of molecular mechanisms and studies of developmental mutants. Topics discussed include molecular biology of eucaryotic choromosomes, genetic mosaics, and models of gene regulation. Sederoff.
Bi 541. Advanced Plant Physiology. 3 credit hours. Lectures on special aspects of plant respiration, salt metabolism, the photochemical reactions of photosynthesis, and on the role, mechanism of action, and metabolism of plant growth substances. Consent of instructor is required. Not offered 1978-79.

## Bi 551. Biology of Fishes. 4 or 8 credit

 hours. The anatomy, development, and biology of fishes. Offered at Institute of Marine Biology for 8 credits. Morris.Ch 562, 563. Advanced Biochemistry. 3 credit hours each term. Enzyme kinetics and detailed consideration of glycolysis, biological oxidation, lipid metabolism, and selected biological synthesis. Winter and spring terms.
Ch 564, 565. Physical Biochemistry. 3 credit hours each term. The Physical Chemical Properties of Biological Macromolecules. Topics include the forces and interactions involved in establishing and maintaining macromolecular conformations, the physical bases of the spectroscopic, hydrodynamic, and rapid reaction techniques used in the investigation of these conformations. Prerequisite: calculus and a knowledge of the elements of
thermodynamics. Offered alternate years, fall and winter.

## Bi 591. Collection and Analysis of Physio-

 logical Data. 5 credit hours. The nature of physiological data, how they may be collected, what to do with them after they have been collected. Introduction to use of minicomputers as laboratory tools by means of a specially designed laboratory language, and by use of electronic devices that simulate in a realistic way actual physiological systems. Prerequisites: Bi 414, 415, and a fundamentalcourse in computer science. Wiitanen. Not offered 1978-79.

Courses Offered Infrequently and Only in Summer Session at Eugene or at Institute of Marine Biology
Bi 477. Planktonology. (G) 4 credit hours. Bi 590. Recent Advanced in Biology. 4 credit hours.


# Oregon Institute of Marine Biology 

Paul P. Rudy, Ph.D., Director, Associ- ate Professor of Biology.

Robert C. Terwilliger, Ph.D., Assistant Director, Associate Professor of Biology.
The University operates the Oregon Institute of Marine Biology at Charleston on Coos Bay, an environment where native vegetation and animal life have been preserved insofar as possible.

The Institute offers a full program of summer study which in recent summers has included such courses as Coastal Biology, Comparative Physiology, Marine Birds and Mammals, Invertebrate Zoology, Experimental Invertebrate Embryology, Marine Ecology, Planktonology, and Biology of Fishes. Summer faculty includes visiting biologists from around the country as well as faculty from the Eugene campus and Institute personnel. A full program of seminars is also available featuring presentations by a variety of guest lecturers.

In the fall term at the Institute, a program is offered for undergraduate biology majors and graduate students. Courses include Marine Ecology, Invertebrate Zoology. Biology of Estuarine Systems as well as an opportunity for an individual to carry out a research project in these areas. A full seminar program on a variety of topics is also arranged for this term.

Spring term at the Institute offers a multi-disciplined course for undergraduates, People and the Oregon Coast, which coordinates the specialized knowledge of biology, sociology, geography, landscape architecture, and urban planning. Environmental concerns are explored and solutions to society's dilemmas are sought through an integration of these disciplines. Students are encouraged to gain first-hand appreciation of the pressures involved in practical decision-making at the local community level. A combination of lectures and field study uses the Coos Bay region as a natural laboratory.

The Marine Station is ideally situated for the study of marine organisms, as many different marine environments are close to the laboratories. The Coos Bay estuary contains interesting rock, mud, sand, eelgrass, and piling communities. The open coast has an exceptionally rich, rocky intertidal area and long stretches of sandy beaches. The laboratories are close to the harbor entrance, and Station boats collect open
ocean organisms within minutes of leaving the dock.

The Station has about 107 acres of property along Coos Bay at Coos Head. The buildings are located on a tract on the bay side of the property close to the post office and stores of Charleston, a small fishing village. The Station is eight miles from Coos Bay and eight from North Bend.
The region is diverse, with urban complexes, estuarine coastal environments, agricultural lands, a major port, and large timber and fishing industries. The social-environmental problems engendered include unemployment, conflict in land use, management of coastal resources, potential urbanization, population increase, tourist impact, industrial development, and declining timber and fishing stock. The region is a natural field station for observation.

Students and faculty reside on the Institute grounds in Charleston; a community of students and staff is able to evolve in a relaxed and informal setting which helps to blend the various disciplines, encourages personal interaction between teacher and student, and has proven to be an exceptionally stimulating educational arrangement. There are four large teaching laboratories, an auditorium, and a dining hall serving as a common room and a fifth lecture hall. The dormitories house fifty students, which is the upper enrollment limit. Five houses are on the station for the staff.

Detailed information and applications may be obtained from the Department of Biology on the Eugene campus, or by writing to the Director, O.I.M.B., Charleston, Oregon 97420.


## Chemistry

Faculty
Richard M. Noyes, Ph.D., Department Head, Professor of Chemistry (physical). A.B., Harvard, 1939; Ph.D., California Institute of Technology, 1942
John E. Baldwin, Ph.D., Professor of Chemistry (organic), and Dean, College of Liberal Arts. A.B., Dartmouth, 1959 ; Ph.D., California Institute of Technology, 1963.
Ralph J. Barnhard, M.S., Senior Instructor in Chemistry and Administrative Assistant (organic) and Assistant Dean, Director of Science Services. B.S., Otterbein, 1959 ; M.S., University of Oregon, 1965.
Sidney A. Bernhard, Ph.D., Professor of Chemistry (biochemistry), and Member, Institute of Molecular Biology. B.S., Brooklyn, 1948 ; M.S., Pennsylvania, 1949; Ph.D., Columbia, 1951.

Virgil C. Boekelheide, Ph.D., Professor of Chemistry (organic). A.B., 1939, Ph.D., 1943, Minnesota.
Frederick W. Dahlquist, Ph.D., Associate Professor of Chemistry (biochemistry), and Member, Institute of Molecular Biology. B.A., Wabash College, 1964 ; Ph.D., California Institute of Technology, 1968
Lloyd J. Dolby, Ph.D., Professor of Chemistry (organic). B.S., Illinois, 1956 ; Ph.D., University of California, Berkeley, 1959.
Thomas R. Dyke, Ph.D., Assistant Professor of Chemistry (physical). B.A., College of Wooster, 1966 ; Ph.D., Harvard, 1972.
Richard G. Finke, Ph.D., Assistant Professor of Chemistry (organic). B.A., University of Colorado, 1972; Ph.D., Stanford University, 1976. Gordon G. Goles, Ph.D., Professor of Chemistry and Geology (geochemistry, cosmochemistry ). A.B., Harvard, 1956, Ph.D., Chicago, 1961.
O. Hayes Griffith, Ph.D., Professor of Chemistry (physical, biophysical) ; Member, Institute of Molecular Biology. A.B., University of California, Riverside, 1960 ; Ph.D., California Institute of Technology, 1964
Edz'ard Herbert, Pli.D., Professor of Chemistry (biochemistry). B.S., University of Connecticut, 1948 ; Ph.D., University of Pennsylvania, 1963.
David R. Herrick, Ph.D., Assistant Professor of Chemistry (physical), and Member, Institute of Theoretical Science. B.S., Rochester, 1969 ; Ph.D., Yale, 1973.

John F. W. Keana, Ph.D., Professor of Chemistry (organic). B.A., Kalamozoo College, 1961 ; Ph.D., Stanford, 1965.
LeRoy H. Klemm, Ph.D., Professor of Chemistry (organic). B.S., University of Illinois, 1941 ; M.S., 1943, Ph.D., 1945, University of Michigan.
Charles E. Klopfenstein, Ph.D., Direcctor of Chemical Laboratories with the Rank of Associate Professor. B.A., 1962, Ph.D., 1966, Oregon.
Thonas W. Koenig, Ph.D., Professor of Chemistry (organic). B.S., Southern Methodist, 1969 ; Ph.D., Illinois, 1963. Robert M. Mazo, Ph.D., Professor of Chemistry (physical), and Member, Institute of Theoretical Science. B.A., Harvard, 1952 ; M.S., 1953, Ph.D., 1955, Yale.
Warner L. Peticolas, Ph.D., Professor of Chemistry (physical). B.S., Texas Technological, 1950 ; Ph.D., Northwestern, 1954.
Francis J. Reithel, Ph.D., Professor of Chemistry (biochemistry). B.A., Reed College, 1936 ; M.A., 1938, Ph.D., 1942, University of Oregon Medical School.
F. Charlotte Schellman, Ph.D., Adjunct Associate Professor of Chemistry (physical). B.S., University of California, Los Angeles, 1946; M.S., 1948, Ph.D., 1950, Stanford.
Iohn A. Schellman. Ph.D., Professor of Chemistry (physical). A.B., Temple University, 1948; M.A., 1949, Ph.D., 1951, Princeton.
Donald F. Swinehart, Ph.D., Professor of Chemistry (physical). B.S., Capital University, 1939 ; M.S., 1941, Ph.D., 1943, Ohio State.
Lynn F. Ten Eyck. Ph.D., Adjunct Assistant Professor (biochemistry). B.S., California Institute of Technology, 1964 ; Ph.D., Princeton University, 1970.
Peter H. von Hippel, Ph.D., Professor of Chemistry (physical biochemistry). Director, Institute of Molecular Biology. B.S., 1952, M.S., 1953, Ph.D., 1955, Massachusetts Institute of Technology.
Raymond G. Wolfe, Jr., Ph.D., Professor of Chemistry (biochemistry). A.B., 1942, M.A., 1948, Ph.D., 1955, University of California, Berkeley.

## Faculty Emeriti

Willian T. Simpson, Ph.D., Professor Emeritus of Chemistry (physical) ; and Member, Institute of Theoretical Science and Institute of Molecular Biology. A.B., 1943, Ph.D., 1948, California, Berkeley; at Oregon since 1963.

## Special Staff

Bruce Birrell, Ph.D., Research Associate. B.A., Willamette, 1962 ; Ph.D., Arizona State, 1967.
Nam Sook Cho, Ph.D., Research Associate B.S., Yonsei University, 1969 ; Ph.D., University of Kentucky, 1977.
Stephen J. Cross, B.S., Research Assistant. B.S., Oregon, 1963.
Gary D. Ewing, Ph.D., Research Associate. B.S. Louisiana State, 1972 ; Ph.D., Ohio State, 1977.
Patricia Jost, Ph.D., Research Associate. B.S., Michigan State, 1952 ; M.S., Georgia, 1959 ; Ph.D., Oregon, 1966.
Michael E. Kellman, Ph.D., Research Associate. B.S., University of California at Berkeley, 1971 ; Ph.D., University of Chicago.
Terry D. Lee, Ph.D., Research Associate. B.S., New Mexico Tech., 1969 ; M.S., Oregon Graduate Center, 1971 ; Ph.D., Oregon, 1977.
Daniel J. McLoughlin, Ph.D., Research Associate, B.S., Wayne State, 1969 ; M.S., John Carroll, 1972 ; Ph.D., Úniversity of Missouri.
Peter Schmid, Ph.D., Research Associate. B.S., 1967, Ph.D., 1971, Swiss Federal Institute of Technology.
Paul H. Scudder, Ph.D., Research Associate. B.S., Stanford, 1971 ; Ph.D., University of Wisconsin.
Kenneth Showalter, Ph.D., Visiting Assistant Professor. B.S., Fort Lewis College, 1971 ; Ph.D., Colorado, 1975. Louis D. Sinss, Research Assistant, Institute of Molecular Biology and Assistant Director of Laboratory, Chemistry.
Richard A. Wielesek, Ph.D., Research
Associate. B.S., Illinois Institute of Technology, 1964 ; Ph.D., Oregon, 1968.

The Department of Chemistry has enjoyed a strong reputation nationally. The National Academy of Sciences has recognized two of the current faculty members by electing them to membership in that prestigious academy. The most recent American Council on Education Survey identified the department as being among the thirty strongest in the nation.

## Undergraduate Studies

The Oregon program in chemistry is designed to provide a broad knowledge of the field as part of a program of liberal education offered by the College of Arts and Sciences. Chemistry course work may also be used to provide a substantial foundation in chemistry for
those stuclents interested in advanced work in chemistry, or other chemistrybased sciences. particularly such fields as biochemistry and molecular biology, geochemistry, and chemical physics. The department also prepares students for teaching in colleges and secondary schools, careers in industrial chemistry, and those stuclents anticipating professional studies in medicine or dentistry.

A very definite strength of the Oregon program is the opportunity undergraduate students have to participate in the activities of a dynamic research group that will be considering problems extending well beyond the level of textbook instruction. Both major and nonmajor stuclents alike can enjoy this experience of true scientific inquiry. Two to three years of course work preparation normally precede the research experience. The clepartment usually enrolls 20-30 undergraduate students each term in Ch 401 Research.

The high-school preparation of a prospective chemistry major should include as much mathematics as possible. One year each of algebra and geometry is a minimum. Students entering with insufficient preparation in mathematics must remedy their cleficiencies in elementary courses offered by the University. Substantial preparation in English, social science, literature, and foreign languages is expected. High school work in chemistry and physics is desirable but not required.

Two-year college students planning to transfer to the University to major in chemistry should prepare by taking courses equivalent to those outlined for the freshman and sophomore years. Questions of course equivalence may be referred to the Department of Chemistry at the University.

For students with superior high school preparation who intend to major in chemistry, who are enrolled in the Honors College, or who are in other sciences, the department offers an advanced General Chemistry course. This consists of the lecture sequence, Ch 204, 205, 206, and an accompanying laboratory sequence, $\mathrm{Ch} 207,208$, and 209. The quantitative and theoretical aspects of chemistry are emphasized.

The recommended curriculum for majors includes the following courses in chemistry and related fields (variations in order may be worked out in consultation with an adviser).

Freshman Year : General Chemistry (Ch 204, 205, 206 with Ch 207, 208, 209 ; or Ch 104, 105, 106 with Ch 107, Ch 108, Ch 109, followed in a subsequent year by Ch 324) ; a year sequence in mathematics (mathematics placement
is determined by high-school records supplemented by College Board scores) : a foreign language (German, French, or Russian).

Sophomore Year: Organic Chemistry (Ch 334, 335, 336) ; Organic Chemistry Laboratory (Ch 340, 341, 342) ; General Physics (Ph 201, 202, 203, Ph 204, 205, 206) ; Calculus (Mth 201, 202, 203 with theory of Calculus, Mth 210, 211,212 recommended concurrently), if not taken in the freshman year: a foreign language.

Junior Year : Physical Chemistry (Ch 441, 442, 443) ; Physical-Cliemistry Laboratory (Ch 446, 447, 448) ; a mathematics elective.

Senior Year: Research ( Cl 401 ) : an advanced elective in chemistry.

The advanced elective in the senior year may be elected from such courses as Biochemistry ( $\mathrm{Ch} 461,462,463$ ), Biochemistry Laboratory ( Ch 464 ), Principles of Chemical Thermodynamics ( Cl 451 ), Principles of Statistical Mechanics (Ch 453), Principles of Quantum Chemistry (Ch 455), Principles of Chemical Kinetics (Ch 457), Advanced Organic Chemistry (Ch 531, 532, 533), Chemical Kinetics (Ch 541, 542,543 ), or it may be arranged with an adviser to include other advanced courses in chemistry or related sciences (i.e., Neurochemistry [Bi 515], X-ray Crystallography [Ph 491], etc.).

The recommendations for the major outlined above meet the specifications of the Committee on Undergraduate Training of the American Chemical Society. Upon notification by the Department of Chemistry, the Society issues certificates to students who successfully complete the recommended curriculum. Students who want a less specialized major, without American Chemical Society certification, may omit the foreign language and in the senior year complete 9 credit hours of advanced elective work at the 400 or 500 level (other than $\mathrm{Ch} 403,405$ or 409). If chemical research is elected as part of the 9 credit hours of advanced work at least 6 credits of Ch 401 must be completed.

## Biochemistry Major

Many undergraduate students who are ultimately interested in advanced study in the sciences at the interfaces between chemistry, biology and physics (e.g., biochemistry, molecular biology, physical biochemistry and perhaps research medicine) may wish to base their training in chemistry but include, as well, relevant courses in biologically based subjects. For these students, the chemistry department offers a modified major, with emphasis in biochem-
istry. The recommended curriculum for these "biochemistry-track" chemistry majors includes the following courses in chemistry and related fields.

Freshman Year: General Chemistry (Ch 104, 105, 106 with Ch 107, 108, 109 ; or Cli 204, 205, 206 with Ch 207, 208, 209) ; a year sequence in mathematics; General Physics (Ph 201, 202, 203) : Seminar.

Sophomore Year: Organic Chennistry ( $\mathrm{Cl}_{1} 331,332,333$ ) ; Organic Chemistry Lab (Ch 337, 338, 342) ; Calculus (if not studied as freshman) ; Molecular, Developmental and Neurobiology (Bi 304, 305, 306) ; Seminar.

Junior Year: Physical Chemistry (Ch 441, 442, 443) ; Physical Chemistry Lab ( $\mathrm{Ch}_{1} 446,447$ ) ; Biochemistry ( $\mathrm{Ch} 461,462,463$ ) ; Seminar.

Senior Year: Biochemistry Lab ( $\mathrm{Ch}_{1}$ 464 ) ; Research (Ch 401) and/or an. advanced elective; Biochemistry Seminar.

The advanced elective courses (9 credit hours) in the senior year may include research and are otherwise similiar to those listed under the regular chemistry major curricula; however, more attention might be directed to courses of a biological or biochemistry nature. If chemical research is included as part of the 9 credit hours of advanced work at least 6 credits of Ch 401 must be completed.

Students who plan to apply to medical schools are advised to research the need for a physics laboratory course that is not included in this curriculum. If certification of the major by the American Chemical Society is sought, then physics laboratory, quantitative analysis, and a foreign language are required in addition to the major requirements cited above along with both chemical research and an advanced elective sequence.

## Secondary School Teaching in Chemistry

Certification as a teacher of science in Oregon public junior or senior high schools requires satisfactory completion of a program of teacher education which includes subject matter preparation in the sciences and in professional education, plus the recommendation of the institution in which the preparation is completed. The Department of Chemistry offers work leading toward an Oregon teaching endorsement in specified science fields at the Basic and Standard certification levels, as determined by the Oregon Teacher Standards and Practices Commission. The University's programs to prepare science teachers are subject to revision to meet changes in certification require-
ments mandated by the Commission effective January 1, 1980. For specific information regarding requirements for one of the science teaching endorsements, students should contact the departmental endorsement adviser for teacher education and the Office of Secondary Education in the College of Education.

The progrann does not satisfy the requirements for a baccalaureate degree in chemistry. Students intending to teach chemistry in secondary schools may meet the requirements for a baccalaureate degree with a major in general science.

## Career Opportunities

Career opportunities for chemists are prevalent in education, government, and industry (see the October 24, 1977 issue of Chenical and Engineering Neze's). Although a baccalaureate degree in chemistry provides a good background for advanced study in such fields as biochemistry, molecular biology, biology, pharmacy, physiology, medicine, medicinal chemistry, metallurgy, geology, oceanography, geochemistry, atmospheric science and other environmental problems, the "chemist" may also be found in jobs such as science writing, public relations, personnel, plant production, sales, management, safety management, market research, patent law, and even financial analysis.

## Graduate Studies

Graduate work in chemistry is a research-oriented Ph.D. program with options in organic, physical, biochemistry, chemical physics, and geochemistry. M.S. and M.A. degrees are also offered. However, except under unusual circumstances, priorities for admission of new students are reserved for the Ph.D. program.

The University of Oregon is on the list of schools approved by the Committee on the Professional Training of Chemists of the American Chemical Society. The Department of Chemistry is housed in a modern science complex, which has ample facilities for research and study, including a machine shop, an electronics shop, a glass blower, and an adjoining "student" shop (directly accessible to graduate students). Graduate students also benefit from the presence of chemistry postdoctoral research fellows on the staff.

Teaching and research fellowships, and postcloctoral fellowships are available. Among the current sponsors of these appointments are the National Science Foundation and the Public

Health Service. Additional information on these awards may be obtained at the time the student applies for admission. Although subject to variation, stipends of fellows, with summer research work, are currently $\$ 5,000$ for the calenclar year. During 1977-78, research projects in the Department of Chemistry were sponsored by the Energy Research and Development Administration, the Na tional Institutes of Health, the National Science Foundation, the DuPont Corporation, the Hoffman La Roche Foundation, the Sloan Foundation, Ciba-Geigy Foundation, Petroleum Research Fund, Research Corporation, the Oregon Heart Association, and the Upjohn Company.

An illustrated publication describing the graduate program in chemistry is available upon request to the department. The booklet presents complete details on the program, facilities, financial support, the faculty and their indlividual research interests, course offerings, housing, and the local enviromment. Persons requesting the booklet will also receive additional information concerning requirements for admission, and instructions and application forms for admission and teaching assistantships.

For convenience, current research interests of the faculty are grouped as biochemistry, organic chemistry, and physical chemistry programs.

## Biochemistry

The research interests of chemistry faculty members in the biochemistry group encompasses a broad spectrum of approaches to the study of the chemistry of the cell. These include the use of physical methods such as X-ray crystallography, analytical ultracentrifugation, and electron spin resonance in studies of the conformation of macromolecules in crystals and in solution, and range to chemical and biological methods such as fluorescence and temperature jump measurements, cell culture techniques, immunochemical methods, protein and nucleic acid fractionation and sequencing techniques, and the latest radiochemical methods to examine the function and biosynthesis of macromolecules.

Research problems currently in progress include studies of the structure and function of nucleic acids and nucleic acid-protein complexes, protein selfassembly and enzyme activity, studies on effects of heavy metal ions on proteins, the structure of nitrogen-fixing enzymes, enzyme catalytic mechanisms, and regulation of synthesis and secretion of adrenocorticotrophic hormone
(ACTH) in cell culture systems.
In 1967, as a consequence of a Health

Sciences Advancement Award from the NIH, major interdisciplinary programs were initiated or strengthened in the areas of neurobiology, developmental biology, and macromolecular chemistry. These programs have fostered strong interactions among members of the chemistry, biology, psychology, and physics departments.

New research and teaching programs have developed in these areas and in the study of the structure and function of biological membranes and immunochemistry. Thus, entering graduate students in chemistry are in an excellent position to take advantage of this molecularly oriented avenue to biological problems. The interdisciplinary nature of these various programs at the University has encouraged communications between staff and students in related disciplines.

## Organic Chemistry

Research activity in organic chemistry is broad in scope, but not simply diffuse. The diverse projects under active investigation evidence the freedom of inquiry and the idiosycrasies of individual scientists as well as a consensus acknowledging the importance of synthetic ability and inventiveness, detailed and rigorous mechanistic probing, direct theoretical or practical relevance, and modernity in research techniques and instrumentation.

Specific problems in the area of natural products include syntheses of tetrodotoxin and its physiologically active derivatives; syntheses of strigol, allethrolone, and related hydroxycyclopentanone derivatives having pesticide activity; syntheses of fungal metabolites such as chaetocin having either antiviral or antitumor activity or both; and syntheses of spin-labelled phospholipids closely related in structure to phospholipids occurring in cell membranes. Systematic studies on new synthetic methods are exploring the use of sulfides and sulfones as synthetic intermediates.

Synthesis of unusual molecules having substituents within the cavity of the pi-electron cloud are being made to provide data for a better theoretical understanding of aromaticity. Mechanistic studies secure and utilize reaction kinetic data, isotopic tracers, kinetic isotope effects, stereochemical tests, and photochemical tests, and photochemical, electrochemical, and thermal reactivity as probes for examining hydrocarbon rearrangements, cycloaddition, freeradical, and ionic reactions, rules based on the conservation of orbital symmetry, the role of solvent in fast reactions, such as radical-radical
recombinations. In addition, there are current research activities in heterogeneous and homogeneous catalysis, synthetic and mechanistic organometallic chemistry, and in bio-organometallic chemistry. Computer methods are being applied both to facilitate routine spectral measurements as well as to extend the range and enhance the power of these established methods.

The space occupied by the organic research group is new and extremely well equipped. In addition to the usual instrumentation and a microanalytical laboratory service, items of note include a high-resolution, double-focusing mass spectrometer with an accompanying dedicated computer and microdensitometer ; a 100 MHz N.M.R. spectrometer complete with Fourier transform capability, heteronuclear decoupler and probes for various nuclei; a spin-echo N.M.R. spectrometer ; 12 Varian 620-I satellite computers for data collection, processing, and, if necessary, transfer to a large computer in the computer center ; Fourier transform infrared instrumentation ; and a photoelectronspectrometer. A fully automated X-ray laboratory with two diffractometers in the Institute of Molecular Biology, located on the floor directly below the organic laboratories, is available on a collaborative basis.

## Physical Chemistry'

Research interests cover a wide range of areas including molecular spectroscopy, theoretical chemistry, chemical dynamics, biophysics, and physical geochemistry. Current interest extends from reactions of diatomic molecules to the conformations of complex biological macromolecules. Specific theoretical work includes the study of molecular electronic state spectra, equilibrium and nonequilibrium statistical thermodynamics, bond excitations and Rydberg states of large molecules, statistical theories of transport processes, theory of very fast chemical reactions, second quantization treatment of molecular exciton Hamiltonians, spin Hamiltonians, theory of vibronic mixing in two and three photon processes, structures of atoms with two electrons excited, and the theory of circular dichroism and optical rotary dispersion. Interdisciplinary cooperation with the Departments of Physics and Mathematics is encouraged and actively supported through ties with the Institute of Theoretical Science. In addition, a Chemical Physics program is available for interested graduate students.

Current experimental studies include vacuum ultraviolet spectroscopy,
fluorescence spectroscopy and energy transfer in aromatic molecules, spectroscopy of oriented systems. Raman and two and three photon spectroscopic processes involving the scattering and absorption of laser light, molecular beam electric resonance spectroscopy, mechanisms of oscillating chemical reactions, rates of diffusion-controlled reactions, kinetics of unimolecular reactions in the gas phase, neutron activation analysis of igneous and metamorphic rocks and ores, factors which determine the three-dimensional structure of proteins and nucleic acids, electron spin resonance of spin-labeled macromolecules, nuclear magnetic resonance of membrane models, and photoelectron spectroscopy of biological surfaces. A number of portable computers are available for on-site signal enhancement, data processing, and instrument control. The Departments of Chemistry, Physics, and Biology maintain central instrument, electronic, and glass shops so that above-average facilities are available for the design and construction of new scientific instruments. The Institute of Molecular Biology is located directly above many of the physical chemistry laboratories and the Institute's coffee room is often a center for lively discussions of macromolecular chemistry.

## Undergraduate Courses

Ch 101, 102, 103. Elementary Chemistry. 4 credit hours each term. An one-year survey of chemistry for the nonscience major. Major areas of emphasis are basic principles, organic chemistry and biochemistry. Does not satisfy prerequisite for upper-division courses in chemistry. Three lectures, one discussion period fall term; two lectures, one discussion period, one three-hour laboratory winter and spring. High school algebra or concurrent enrollment in Mth 95 is recommended.
Ch 104, 105, 106. General Chemistry. 3 credit hours each term. An introduction to the field of chemistry, providing an understanding of chemical structure, chemical equilibrium, chemical dynamics, and the chemical reactions of the elements. May be used as a prerequisite for upper-division courses in chemistry. Three lectures. Prerequisite: concurrent Mth 101 or higher. Ch 107. Introductory Chemistry Laboratory. 2 credit hours. Experiments related to fundamental chemical principles. One lecture-discussion and one three-hour laboratory period. Prerequisite: Mth 101, or equivalent; Ch 104, or concurrent enrollment. Ch 108. Introductory Analytical Chemistry I. 2 credit hours. Introduction to quantitative inorganic analysis employing gravimetric and volumetric techniques. Prerequisite: Ch 107; Ch 105 , or concurrent enrollment.
Ch 109. Introductory Analytical Chemistry II. 2 credit hours. Continuation of Ch 108. Introduction to potentiometric and photometric instrumental methods. Prerequisite: Ch 108; Ch 106, or concurrent enrollment.

Ch 110, 111, 112. General Chemistry
Seminar. 1 credit hour each term. A study of relationships of chemistry to the concerns of liberal arts: interactions between chemical technology and science, relation of abstraction to empiricism in chemistry, and the economic and cultural consequences of chemical research. Designed for students not continuing in chemistry, but wishing to use Ch 104, 105, 106 to fulfill group requirement. May be substituted for Ch 107, 108, 109 for this purpose. Prerequisite: concurrent enrollment in Ch 104, 105, 106. Not offered 1978-79.

## Ch 121. Chemistry, Nutrition, and World

Food. 3 credit hours. A chemistry course about food designed for nonscience-oriented students. Some basic chemical concepts such as atoms, molecules, and energy as they relate to food are presented, followed by a consideration of food chemicals such as proteins, carbohydrates, fats, minerals, vitamins, and food additives. Other topics include essential nutrients, nutritional diseases, problems of world food production (green revolution, fertilizers, energy, land and water) and distribution, nonrenewable resources, population growth, and the "Lifeboat Ethic." No prerequisites.
Ch 123. Chemical Origins of Life. 3 credit hours. The chemical composition and changing nature of the earth before life began, the types of molecules which could provide building blocks for self-reproducing (living) systems, and theories of transitions to living systems. The question of extraterrestrial life. Experimental evidence and theories on the origins of life and its existence elsewhere. Intended for, but not restricted to, nonscience majors. Bi 105 recommended, but not required as prerequisite.
Ch 204, 205, 206. General Chemistry. 3 credit hours each term. First-year college chemistry for selected students with excellent backgrounds in high-school chemistry, physics, and mathematics. Quantitative and theoretical aspects of the subject emphasized, with less descriptive material than in Ch 104, 105, 106. Open to Honors College students and other well-prepared students. Selection is based chiefly on mathematics preparation. Three lectures. Prerequisite: prior study of or concurrent registration in calculus.

## Ch 207. Semi-micro Inorganic Qualitative

 Analysis. 3 credit hours fall. The separation and identification of cations and anions by semimicro methods. Planned to accompany Ch 204. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. Two three-hour laboratory periods ; one lecture period.Ch 208. Volumetric Analysis. 3 credit hours winter. The quantitative estimation of selected molecular species by titration procedures. Planned to accompany Ch 205. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. Two threehour laboratory periods; one lecture period.

## Ch 209. Gravimetric Analysis. 3 credit

 hours spring. The separation and gravimetric determination of selected inorganic species. Planned to accompany Ch 206. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. Two three-hour laboratory periods; one lecture period.
## Ch 210. Tutorial General Chemistry.

1 credit hour. Small group discussions of topics emphasized in Ch 104, 105, and 106.

Bi 304. Molecular Genetics. 3-5 credit hours. An examination of the biologically fundamental processes of reproduction and variation at the molecular level. Experiments leading to our present views are described. Topics are the chemical structure of the genic material, the mechanisms of gene duplication, mutation and recombination, and the formal relationships between genes and their protein products. Students taking this course should plan to take Bi 305 in the following term; Bi 304 and 305 are precisely dovetailed in their presentation of the biochemical and genetic bases of cellular activities. Three lectures, one laboratory/discussion period. Prerequisites: either Organic Chemistry and one year of college mathematics, or ore year of General Chemistry and one year of General Physics.
Bi 305. Gene Action and Development. 3-5 credit hours. How the genetic information is utilized to direct cellular and organismal development. Particular topics include control of protein synthesis and enzyme activity, macromolecular architecture and organelle assembly, and aspects of animal development (embryogenesis, cell determination and differentiation, patterning). Three lectures, one laboratory/discussion period. Prerequisite: Bi 304 .
Ch 324. Quantitative Analysis. 4 credit hours spring. A lecture-laboratory course in the use of instrumental methods for quantitative determinations of unknown chemical samples. Designed to follow Ch 109 or Ch 209. Required for majors who completed the Ch 109 series laboratory. Satisfies the requirements for quantitative analysis for admission to medical or dental schools. Prerequisite : Ch 109 or Ch 209.
Ch 331, 332, 333. Organic Chemistry. 3 credit hours each term. A study of the compounds of carbon, their structure, reactions, and synthesis with special emphasis on examples having biological interest. As the course progresses, emphasis will turn to organic chemical applications for biological systems and an introduction to biochemistry covering aspects of proteins (enzymes), nucleic acids, and their conformations and functions in biocatalysis and replication. Ch 331, 332, 333 is designed as a sequence appropriate to the needs and interests of "Biochemistry Track" chemistry majors, biology majors, premedical and predenta! students, and medical technology students. Prerequisite: Ch 106 or 206.
Ch 334, 335, 336. Organic Chemistry. 3 credit hours each term. A comprehensive study of the chemistry of the compounds of carbon. Required for chemistry majors; open to Honors College students and others wanting more extensive coverage of organic chemistry. Three lectures. Prerequisite: Ch 106, or Ch 206.
Ch 337, 338. Introductory Organic Laboratory. 2 credit hours each term, fall and winter. Introduction to the principles and techniques of laboratory practice in organic chemistry. Special emphasis on examples having biological interest. A laboratory sequence to accompany Ch 331 and Ch 332. Prerequisite: Ch 109 , or Ch 209. One lecture ; one three-hour laboratory period.
Ch 310. Tutorial Organic Chemistry.
1 credit hour. Small group discussions of topics emphasized in Ch 331, 332, 333 or Ch 334, 335, 336.
Ch 340, 341, 342. Organic Chemistry Laboratory. 3 credit hours each term. A survey of the principles and techniques fundamental to laboratory practice in organic chemistry, including aspects of both qualitative and
quantitative organic analysis. Prerequisite: Ch 109, or Ch 209 , with a grade of C or better. Required for chemistry majors; open to Honors College students by selection, and to others wanting a more comprehensive training in laboratory practice than is provided in Ch 337, 338. One lecture; two threehour laboratory periods.
Ch 401. Research. Credit hours to be arranged. For advanced undergraduates. An introduction to the methods of chemical investigation.
Ch 403. Thesis. Credit hours to be arranged. Open only to students eligible to work for the bachelor degree with honors in chemistry. Ch 405. Reading and Conference. Credit hours to be arranged.

## Ch 407. Seminar. Credit hours to be arranged.

Biochemistry. 1 credit hour fall term. For the participation of undergraduates, who have not yet taken the Biochemistry sequence (Ch 461, 462, 463), informal discussion of topics on current research interest. Students must be enrolled in the "Biochemistry Track" program. Discussions will be led by the biochemistry staff. Pass/No Pass. only. Ch 407. Seminar. (g) Credit hours to be arranged.

Biochemistry. 1 credit hour fall, winter, and spring terms. For the participation of undergraduates in the graduate student seminar who are enrolled in the "Biochemistry
Track" program and who have already taken the Biochemistry sequence ( $\mathrm{Ch} 461,462$, 463). Pass/No Pass only.

Ch 409. Special Laboratory Problems. Credit hours to be arranged. Provides laboratory instruction not classifiable as research; laboratory work covered in other courses is not duplicated. Consent of instructor is required.
Ch 410. Experimental Course. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

Ch 411, 412. Physical-Inorganic Chemistry. (G) 3 credit hours each term, fall and winter. A comprehensive study of the structure, properties, and reactions of atomic and molecular species in the various states of aggregation. Prerequisite : three years of college chemistry.
Bi 422. Genetics. (G) 3 credit hours. A study of the transmission and regulation of the hereditary material in eukaryatic organisms including classical gene mapping, and somatic cell genetics, sex determination, genome structure and change, developmental genetics, and an introduction to population genetics. Prerequisite : Bi 304 or equivalent, or consent of instructor. Sederoff.
Ch 429. Survey of Analytical Chemistry.
(g) 4 or 5 credit hours. Not offered 1978-79.

Ch 441, 442, 443. Physical Chemistry. (g)
4 credit hours each term. Comprehensive study of the theoretical aspects of physicalchemical phenomena. Atomic and molecular properties ; macroscopic systems in equilibrium; nonequilibrium macroscopic systems. Four lectures. Prerequisite: two years of college chemistry (except for physics majors), one year of calculus; and college physics.
Ch 446, 447, 448. Physical Chemistry Laboratory. (g) 3 credit hours each term.
Instrumental techniques of present-day research. An introduction to electronics and chemical instrumentation; experiments
utilizing optical spectroscopy, nuclear magnetic resonance, high vacuum techniques, gas chromatography, computers, electron spin resonance, and other instrumental methods. Experiments include thermodynamic and kinetic measurements and individual research projects. Prerequisite: Ch 441, 442, 443 (may be taken concurrently). Two three-hour laboratory periods, one one-hour discussion.
Ch 451. Principles of Chemical Thermodynamics. (G) 3 credit hours. The laws of thermodynamics and their applications, including those to nonideal chemical systems. Prerequisite: Ch 441, 442, 443, or equivalent. Ch 453. Principles of Statistical Mechanics. (G) 3 credit hours. The molecular basis of thermodynamics. Applications to the the calculations of the properties of noninteracting and weakly interacting systems. Prerequisite: Ch 441, 442, 443, or equivalent.
Ch 455. Principles of Quantum Chemistiy. (G) 3 credit hours. The principles of quantum mechanics and their application to problems of chemical interest, including time-dependent problems. Prerequisite: Ch 441, 442, 443, or equivalent.
Ch 457. Principles of Chemical Kinetics. (G) 3 credit hours. Description and interpretation of the time evolution of chemical systems. Prerequisite: Ch 441, 442, 443, or equivalent.
Ch $461,462,463$. Biochemistry. (G) 4 credit hours each term. Emphasis on the structure and functions of biological macromolecules, metabolism and metabolic control process, protein and nucleic acid synthesis, and biochemical genetics of pro- and eukaryotic cells. Prerequisite: Ch 331, 332, 333, or their equivalents. Some prior exposure to calculus and physical chemistry helpful but not required.
Ch 464. Biochemistry Laboratory. (G) 4 credit hours winter. Designed to illustrate approaches currently being used in research in enzyme kinetics, protein purification, protein structure, nucleic acid purification, nucleic acid structure, and in the study of protein synthesis in intact cells and cell-free systems. Two four-hour laboratory periods and one to two hours of conference a week. Selected students may continue with projects in the spring term under Ch 409. Consent of instructor is required.
Ch 471. Chemical Instrumentation. (G)
3 credit hours. Theory and operation of chemical instrumentation used in research laboratories; techniques used to perfect instrument performance, including application of computer technology for acquisition and presentation of data. Consent of instructor is required.

## Bi 481, 482. Biology of Prokaryotic

Organisms. (G) 3 credit hours each term. Bi 481 : Biology of photosynthetic prokaryotic organisms, including structure, physiology, genetics, and natural history of the blue-green algae and photosynthetic bacteria. Three hours of lecture per week. Consent of instructor is required. Offered 1978-79 and alternate years. Castenholz and Sistrom.
Bi 482: Biology of bacteria including structure, physiology, genetics, and natural history. Major emphasis on nonphotosynthetic bacteria. Three hours of lecture per week. Consent of instructor is required. Offered alternate years. Not available 1978-79. Sistrom and Castenholz.
Bi 487. Advanced Molecular Genetics. (G) 3 credit hours. Growth, mutation, recombination, and regulation of DNA, RNA and protein synthesis in phage, bacteria and lower eukaryotes. Lectures and discussion. Pre-
requisite: Bi 304 and Bi 305 , or equivalent, or consent of instructor. Herskowitz, Smith, Stahl.
Bi 489. Membrane Structure and Function.
(G) 3 credit hours. Chemical composition and nolecular structure of biological menbranes, with particular reference to mitochondrial and erythrocyte membranes. Functions of membranes including transport, cell-cell recognition and interaction, energy transduction, hormone action. Two lectures and conference. Capaldi.
Ph 491. X-ray Crystallography. (G) 4 credit hours. X-ray diffraction. Bragg's law, crystal symmetry, the reciprocal lattice, structure factors and Fourier syntheses, the phase problem, methods of determining small and macromolecular crystal structures. Laboratory work includes manipulation and alignment of crystals, taking and analyzing X-ray photographs, and use of basic X-ray diffraction equipment. Three lectures, one laboratory period. Consent of instructor is required.

## Graduate Courses

Ch 501. Research. Credit hours to be arranged. No-grade course.
Ch 503. Thesis. Credit hours to be arranged. No-grade course
Ch 505. Reading and Conference. Credit hours to be arranged.
Ch 507. Seminar. 1 credit hour each term. Seminars offered in physical chemistry and organic chemistry.
Ch 507. Biochemistry Seminar. 1 credit hour any term. Seminars are presented on. topics of current biochemical interest by graduate students. Presentations may be of a topic from the biochemical literature or on the original research work of the speaker. Faculty members assist the students in preparing the seminar, and organized constructive criticism of presentation techniques follows. Repeated enrollment is permitted. No-grade course.
Bi 507. Genetics Seminar. 1 credit hour any term. Topics of current interest in genetics of prokaryotes and eukaryotes are explored through readings of the original literature, reports and discussions. Subject matter and faculty participants change each term. Visiting lecturers often are involved. Repeated enrollment is permitted. When subject matter overlaps, Genetics and Molecular Biology Seminars may be held jointly. No-grade course.
Ch 507. Molecular Biology Seminar. 1 credit hour any term. Topics of current interest in the general area of molecular biology are explored through readings of the original literature, reports and discussions. Subject matter and faculty participants change each term. Visiting lecturers are often involved. Recent topics have included: Mechanisms of Transport across Membranes, Mutagenesis, DNA Synthesis, Membrane Structure, Jumping Genes, Enzyme Structure and Function, Molecular Immunology. The fall term seminar of alternate years is devoted to a rotating symposium covering the work of the various research labs working in molecular biology at the University. Repeated enrollment is permitted. When subject matter overlaps, Molecular Biology and Genetics Seminars may be held jointly. No-grade course.
Ch 510. Experimental Course. Credit hours to be arranged.
Ch 511. Special Topics in Physical Chemistry. 3 credit hours. Topics of current interest
reflecting research activities of the staff include:
Magnetic Resonance Spectroscopy. Griffith,
Nonequilibrium Thermodynamics and
Statistical Mechanics. Mazo.
Diffusion-Controlled Reactions. Noyes.
Multiphoton Spectroscopy. Peticolas.
Theory of Optical Rotation. Schellman.
Theory of Unimolecular Reactions.
Swinehart.
Optical Spectroscopy. Schellman, Peticolas.
Ch 512. Special Topics in Organic Chemis-
try. 3 credit hours. Topics include catalysis and surface chemistry, organometallic chemistry, concerted cycloaddition reactions, free radical chemistry, heterocyclic chemistry, molecular calculations, molecular spectroscopy, natural products and alkaloid chennistry, and synthetic methods.
Ch 513. Special Topics in Biochemistry.
3 credit hours. Topics of current interest are :
Enzyme Mechanisms. Bernhard, Wolfe.
Stability and Conformation of Macromolecules. Von Hippel.
Stifucture and Function of Nucleic Acids and
Nucleic Acid Protein Complexes. Von Hippel.
Conformational Analysis of Macromolecules.
Schellman.
Protein and Nucleic Acid Biosynthesis.
Herbert.
Macromolecular Carbohydrates and Glycoproteins. Reithel.
Protein Subunit Equilibria and Self-Assembly
Problems in Biological Structures. Reithel.
Biochemical Regulation in Higher Organisms. Herbert.
X-Ray Crystallography. Matthews.
Membrane Structure and Function. Griffith and Capaldi.
Macromolecule Studies by Magnetic
Resonance Techniques. Dahlquist and Griffith.
Bi 515. Neurochemistry. 3 credit hours.
Biochemistry specific to the nervous system
with an emphasis on synaptic chemistry;
identification of neurotransmitters; post-
synaptic events ; correlation of chemical events with neuroanatomy and physiology ; current problems and experimental approaches. Two lectures and one hour of discussion. Consent of instructor is required.
Prerequisite: Ch 333, Bi 415, or equivalent.
Bi 526. Developmental Genetics. 3 credit
hours. An analysis of genetic regulation of development including investigations of molecular mechanisms and studies of developmental mutants. Topics discussed include molecular biology of eukaryotic chromosomes, polytene and lampbrush chromosomes, conditional lethal mutants, genetic mosaics, and models of gene regulation. Sederoff.

## Ch 531, 532, 533. Advanced Organic

Chemistry. 3 credit hours each term.
Advanced general survey of organic chemistry; structural theory, syntheses, scope and mechanism of reactions.

## Ch 541, 542, 543. Chemical Kinetics. 3

 credit hours each term. The work of each term is selected from such topics as: classical kinetic theory of gases, statistical mechanics, statistical thermodynamics, chemical kinetics in the gas phase and in solution, catalysis. Offered alternate years.Ch 545, 546. Quantum Chemistry. 3 credit hours each term. Topics of chemical interest discussed in terms of the quantum theory. Introduction to wave mechanics, discussion of chemical bonding and the origin of the theory of resonance, and topics from atomic and molecular spectra.
Ch 553, 554. Statistical Thermodynamics. 3 credit hours each term, winter and spring. Molecular interpretation of the properties of equilibrium systems; principles and applica-
tion to gases, crystals, liquids, phase transitions, solutions, electrolytes, gas adsorption, polymers, chemical equilibria, etc. Offered alternate years. Students nay take Ph 451 , 452,453 when Ch 553,554 are not offered. Ch 562, 563. Advanced Biochemistry. 3 credit hours each term, winter and spring. Enzyme kinetics and detailed consider ation of glycolysis, biological oxidation, lipid metabolism, and selected biological synthesis.
Ch 564, 565. Physical Biochemistry. 3 credit hours each term, winter and spring. The Physical Chemical Properties of Biological Macromolecules. Topics include the forces and interactions involved in establishing and maintaining macromolecular conformations, the physical bases of the spectroscopic, hydrodynamic, and rapid reaction techniques used in the investigation of these conformations. Prerequisite: calculus and a knowledge of the elements of thermodynamics. Offered alternate years.

## Classics

## Faculty

C. Bennett Pascal, Ph.D., Department Head, Professor of Classics (Latin and Greek literature, Roman religion).
B.A., 1949, M.A., 1950, California at Los Angeles ; M.A., 1953, Ph.D., 1956, Harvard.
Teresa C. Carp, Pl.D., Assistant Professor of Classics (L_atin and Greek literature, Roman history, paprology). B.A., Washington University, St. Louis, 1966 ; M.A., 1968, Ph.D., 1972, California.
Steven D. Lowenstam, Ph.D., Assistant Professor of Classics (Greek and Latin literature, Homer, linguistics). B.A., Chicago, 1967 ; M.A., 1969, Ph.D., 1975, Harvard.

## Faculty Emeriti

Frederick M. Combellack, Ph.D., Professor Emeritus of Greek Literature (Greek literature). B.A., Stanford, 1928; Ph.D., California, 1936; at Oregon since 1937.

## Undergraduate Studies

The aim of the program in classics is to equip students to deal directly with the civilizations of Greece and Rome by giving them the necessary command of Greek and Latin, and providing a variety of courses covering the most important Greek and Latin poets, historiains, orators, and philosophers. Courses in Greek and Roman history are offered by the Department of History and courses in ancient art and archaeology by the Scliool of Architecture and Allied Arts.

## Major Requirements

Major requirements for the Bachelor of Arts degree are as follows:

Greck or Latin. Twenty-four credit hours in Greek or Latin beyond the second-year secjuence; History of Greece (Hst 411), History of Rome (Hst 412, 414). Majors in Greek or Latin are normally expected to take work in the other classical language and should, if possible, also take some work in a modern language. Students.
planning to do graduate work in Classics are urged to take German.

## Classical Civilization

A nonspecialized course of study of the arts and institutions of ancient Greece and Rome, for students who clesire a broad, classically based education, with a minimum of language study.

Latin or Greck, 2nd-year level. (Students with four years of highschool Latin or Greek take one year of a third-year course at the University of Oregon.) History of Greece (Hst 411), History of Rome (Hst 412, 413) ; Literature of the Ancient World (Cl 301, 302, 303) ; Ancient Art (ArH $411,412,413$, or $414,415,416) ; 18$ credit hours of electives in Classics, Arts and Letters, Rhetoric, English, Philosophy, or Religion selected in consultation with an adviser from Classics.

Electives may be chosen from the following list of options: New Testament Readings (Grk 231) ; Greek and Latin courses numbered from 301-519; Clasical Elements of English, 3 credit hours (Ling 150, Cl 210) ; Classical World, 3 credit hours each term (Cl 307, 308, 309) : Classic Myths, 3 credit hours (Cl 321) ; Early Mediterranean Art; 3 credit hours each term ( ArH 411, 412. 413) : Greek and Roman Art, 3 credit hours each term (ArH 414, 415,416 ) : Theory and Literature of Rhetoric, 3 credit hours each term (RhCm 301, 302, 303) ; Rhetorical Theory: 400 B.C.-1 A.D., 3 credit hours (RhCm 414): Rhetorical Theory: 1 A.D.-800 A.D., 3 credit hours ( RhCm 415 ) ; History of Ancient Philosophy, 3 credit hours each term (Phl 301, 302, 303) ; Plato, 3 credit hours (Phl 411) ; Aristotle, 3 credit hours (Phl 413) ; Tragedy, Epic, Comedy, Satire, 3 credit hours each term (Eng 301, 303, 304, 305) ; History of Literary Criticism, 3 credit hours each term (Eng 414, 415, 416) ; History of Christianity, 3 credit hours each terni ( $\mathrm{R} 321,322,323$ ) ; seminars and colloquia (400-410, 500-510) on classical topics, with consent of adviser.

## Secondary School Teaching of Latin

For certification as a teacher of Latin in Oregon high schools, the Oregon Teacher Standards and Practices Commission requires (1) the satisfaction of certain ntinimum standards of subject preparation, and (2) the recommendation of the institution in which the student completed subject preparation.

Completion of 45 credit hours of work in Latin satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon. Students planning to enter secondary-school teaching should consult the College of Education about requirements and specific recommended courses.

For permanent certification, after a fifth year of preparation, the student must complete an additional 15 credit hours in linguistics, culture, and civili-
zation. The following courses are recommended: Ling 450, 451, 460 ; Hst 412, 413.

## Graduate Studies

Graduate programs are offered in Classics leading to the degree of Master of Arts in (1) Greek, (2) Latin, and (3) Classics. In either (1) or (2), the student concentrates his or her graduate work in either Greek or Latin. In (3) the suclent takes graduate work in both Greek and Latin. Students working toward a degree in either Greek or Latin will ordinarily be expected to take some work in the other language unless they have already done so. All students must demonstrate a proficiency in French or German sufficient for conducting research in the Classics. Stuclents who have not already had a year course in ancient history will be expected to include ancient history in their graduate program.

The Master of Arts degree with thesis will be awarded upon the completion of 45 hours of course work, to include 9 hours of Lat 503 or Grk 503, Thesis.

The Master of Arts degree without thesis will be awarded upon the completion of 45 hours of course work and a written examination, which will be based in part on an outside reading list, which will have been compiled in cooperation with the student's adviser.

## Interdisciplinary M.A. in Classical Civilization

The department is currently developing an interdisciplinary Master of Arts clegree for students whose primary interest is not ancient literature, but who contemplate advanced study or careers in Classical Archaeology, Ancient History, Ancient Philosophy, or Religion.

## Greek

Undergraduate Courses
Grk 50, 51, 52. First-Year Greek. 4 credit
hours each term. First two terms, the fundamentals of the Attic Greek language. Third term, continuation of grammatical study with most of the term devoted to readings in Attic Greek and in koine.
Grk 199. Special Studies. 1-3 credit hours.
Grk 231. New Testament Readings. 1-4 credit hours. Selected readings from the the New Testament. May be repeated for credit.
Grk 301. Authors: [Term Subject]. 3 credit hours. Each term will be devoted to the study of a major Greek author: Homer, Plato, or Euripides. May be repeated for credit under different term subjects.
Grk 347, 348, 349. Greek Prose Composition. 1 credit hour each term.
Grk 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses <br> Carrying Graduate Credit

Grk 407. Greek Seminar. (G) Credit hours to be arranged.
Grk 411. Authors [Term Subject]. (G) 3 credit hours. Each term will be devoted to a different author or literary genre : Euripides and other tragedians, Sophocles, Aeschylus, Plato, Aristotle, Demosthenes, Herodotus, Lyric Poetry, Comedy, Pastoral, etc. May be repeated for credit under different term subjects.
Grk 415. Aristotle's Ethics. (G) 3 credit hours. Reading of the Nicomachean Ethics. Lectures on ancient ethical theories and on Aristotle's relationship to Plato. Not offered 1978-79.

## Graduate Courses

Grk 501. Research. Credit hours to be arranged.
Grk 503. Thesis. Credit hours to be arranged. No-grade course.
Grk 505. Reading and Conference. Credit hours to be arranged.
Grk 507. Greek Seminar. Credit hours to be arranged.

## Latin

## Undergraduate Courses

Lat 50, 51, 52. First-Year Latin. 4 credit hours each term. Fall and winter : fundamentals of Latin grammar; spring: selected readings from classical and medieval authors.
Lat 101, 102, 103. Introduction to Latin Prose, Poetry, and Drama. 4 credit hours each term. Each term will be devoted to the study of a major Latin author : Cicero, Virgil, or Terence.
Lat 199. Special Studies. 1-3 credit hours.
Lat 301. Authors: [Term Subject]. 3 credit hours any term. Readings in selected authors of the Roman Golden Age : Livy, Virgil, Horace. May be repeated for credit under different term subjects.
Lat 347, 348, 349. Latin Composition. 1 credit hour each term. Survey of classical Latin syntax; extensive practice in prose composition. Designed for majors and prospective teachers. Offered alternating years. Pascal.
Lat 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses <br> Carrying Graduate Credit

Lat 407. Latin Seminar. (G) Credit hours to be arranged.
Lat 411. Authors: [Term Subject]. (G) 3 credit hours any term. Each term will be devoted to a different author or literary genre: Catullus, Tacitus, Juvenal, Pliny, Lucretius, Comedy, Philosophy, Elegy, Epic, Satire, etc. May be repeated for credit under different term subjects.
Lat 414. Readings in Medieval Latin. (G) Credit hours to be arranged. May be repeated for credit.

Lat 417. Cicero's Philosophical Works.
(G) 3 credit hours. Reading of the Tusculan Disputations and the De officiis. Cicero's role as an eclectic philosopher. Not offered 1978-79.
Lat 421. Latin Grammar Review. (g) 3 credit hours. A formal grammar review course for students with some previous exposure to the language who wish to renew their skills; and for students with no previous experience who believe that they can keep up with the accelerated pace. Offered as needed.
Lat 447, 448, 449. Latin Prose Composition. (G) 1 credit hours each term. Composition of continuous Latin prose basedoman intensive study of stylistic models from classical literature. Prerequisite : Lat 347, 348, 349. Offered in alternating years.

## Graduate Courses

Lat 501. Research. Credit hours to be arranged.
Lat 503. Thesis. Credit hours to be arranged. No-grade course.
Lat 505. Reading and Conference. Credit hours to be arranged.
Lat 507. Latin Seminar. Credit hours to be arranged.

Classics in Translation

## Undergraduate Courses

Cl 199. Special Studies. Credit hours to be arranged.
Cl 301. Literature: Greek Epic. 3 credit hours. Analysis of the Homeric poems, the works of Hesiod, and the transitional literature between the archaic period and the fifth century from the viewpoint of literary criticism and intellectual history. S. Lowenstam.
Cl 302. Literature: Greek Drama. 3 credit hours. Examination of Greek tragedy and comedy from the viewpoint of literary criticism and intellectual history. S. Lowenstam.
C1 303. Literature: Greek Philosophy. 3 credit hours. Introduction to the philosophies of Plato and Aristotle from the viewpoint of Greek intellectual history.
$\mathrm{Cl} 307,308,309$. Classical World. 3 credit hours each term. Source materials and lectures will provide a general introduction to the origins and development of the major social, economic, political, religious and intellectual systems of the Classical age of the West. Fall: ancient Greece; Winter: Hellenistic Civilization; Spring : ancient Rome. The major Greek and Latin authors as well as some documentary sources will be read in English. Carp.
Cl 320. Classical Archaeology. 3 credit
hours. Explores the rationale and aims of
Classical archaeology, examines the day-today processes of a major ongoing excavation, and asks the questions which might help elucidate the problems concerning the religion, culture, and history of the ancient world.
C 1 321. Classic Myths. 3 credit hours. The major mythological cycles of the ancient world: Troy, Thebes, and heroes. Literary and mythographic sources will be read in English. Pascal, Carp.
C1 405. Reading and Conference. Credit hours to be arranged.
Cl 407. Seminar. (g) Credit hours to be arranged.

## Upper-Division Courses

 Carrying Graduate CreditCl 407. Seminar. (G) Credit hours to be arranged.
Cl 410 . Experimental Course. (G) Credit hours to be arranged.

## Graduate Courses

Cl 501. Research. Credit hours to be arranged.
Cl 503. Thesis. Credit hours to be arranged. No-grade course.
Cl 505. Reading and Conference. Credit hours to be arranged.
C1 507. Seminar. Credit hours to be arranged.
Cl 509. Practicum. Credit hours to be arranged.

## Computer Science

## Faculty

Stephen Hedetniemi, Ph.D., Department Head, Professor of Computer Science (analysis of algorithms, parallel processing). B.S., 1960, M.S., 1962, Plı.D., 1966, Michigan.
Gordon P. Ashby, M.B.A., Senior Instructor in Computer Science (systems programming) ; joint appointment with the Computing Center. B.S., Oregon State University, 1959 ; M.B.A., University of California at Los Angeles, 1961.

Wendell Terry Beyer, Ph.D., Assistant Professor of Computer Science (computer programming, theory of computation) ; joint appointment with Computing Center. B.A., 1962, M.A., 1964, Oregon; Ph.D., Massachusetts Institute of Technology, 1969.
Arthur M. Farley, Ph.D., Assistant Professor of Computer Science (artificial intelligence). B.S., Rensselaer, 1968 ; Ph.D., Carnegie-Mellon University, 1974.
Joanne A. Hugi, M.S., Instructor in Computer Science (administrative applications programming) ; joint appointment with the Computing Center. B.S., Connecticut, 1965 ; M.S., Oregon, 1971.
Sandra L. Mitchell, Ph.D., Assistant Professor of Computer Science (data structures, analysis of algorithms). B.A., Centre College of Kentucky, 1971 ; M.S., 1973, Ph.D., 1977, Virginia.
Peter Moulton, Ph.D., Assistant Professor of Computer Science (microcomputer applications, geographic information systems ). B.S., Chicago, 1960 ; M.S., 1966, Ph.D., 1971,
Wisconsin.
David G. Moursund, Ph.D., Professor of Computer Science (computers in education, numerical analysis). B.A., Oregon, 1958 ; M.S., 1960, Ph.D., 1963, Wisconsin.
Andrzej Proskurozeski, Ph.D., Assistant Professor of Computer Science (combinatorial algorithms, complexity of computation). M.S., Warsaw University, 1967 ; Ph.D., Royal Institute of Technology, Stockholm, Sweden, 1974. George W. Struble, Ph.D., Associate Professor of Computer Science. B.A., Swarthmore, 1954 ; M.S., 1957, Ph.D., 1961, Wisconsin.
Patrick Wang, M.S., Acting Assistant Professor of Computer Science (formal languages, compilers). B.S., National Chiao Tung University, 1968 ; M.S., National Taiwan University, 1971;
M.S., Georgia Institute of Technology, 1974.

Computer science courses are designed to provide applied and theoretical training in the use of computers. Introductory and service courses are both designed to fit the needs of students majoring in a variety of fields. More advanced courses are designed for stu1dents seeking a career in the computer science field.

Computing facilities available for instructional purposes include an IBM $360 / 50$ used for batch processing and a PDP-10 used for time-shared computing. The University of Oregon has about two dozen small computers, mostly used for research and instruction in the various sciences. The computer science department has a Microdata 3200 and an IMSAI 8080 system for such purposes.

The computer science program at the University of Oregon has been changing in recent years. Each year, the content of many courses changes substantially, and new courses are added. New courses are generally offered as CS 410 or CS 510 experimental courses the first time or two that they are offered. The computer science department also offers a substantial summer session program, including more than fifteen different courses.

## Undergraduate Studies

The Department of Computer Science offers the Bachelor of Arts and Bachelor of Science degrees. Each program requires a minimum of 36 credit hours of work in computer science (of which at least 24 credit hours must be upper division), and an approved 18 credit hour upper-division minor in a field outside of computer science. A student's progran must include at least one year of mathematics, to include at least one term of calculus. The courses CS 333, 461,472 , and 473 do not count as upperdivision credit toward a CS major. Required computer science courses include Programming Practicum (CS 423, 4 credit hours), and the year sequence, Intermediate Computer Science (CS 301, 302, 303, 4 credit hours each term). The course CS 302 has Mth 231 as a prerequisite, and Mth 232 as a prerequisite or corequisite. Thus these connses (or their equivalent) must be included in the CS major's program. Potential CS majors starting in CS 201 should consider taking Mth 231 and 232 concurrently with CS 202 and 203. All courses taken to satisfy the major and minor require-
ments must be passed with a grade of C or better.

High school students planning to major in computer science should pursue a strong academic program, and include substantial work in mathematics. Work in the computer programming field is desirable, but not required. Entering freshmen will ordinarily take Introduction to Computer Science (CS 201, 202, 203, 4 credit hours each term) if they intend to major in computer science.

Transfer students from two-year colleges and other schools should attempt to complete as many of the general requirements of the University as they can before entering the University. In addition, they should complete at least one year of mathematics (including one term of calculus), and lower-division courses in a field in which they intend to complete their upper-division work as a minor. Finally, they should take some introductory computer-programming courses. Students transferring from a school offering only a single computer programming course (or no programming courses) should consult a Computer Science adviser about the possibility of attending a University of Oregon Summer Session to obtain additional computer programming background prior to transferring to the University of Oregon.

## Graduate Studies

The Department of Computer Science offers the Master of Arts and Master of Science degrees, as well as interdisciplinary masters' degrees between computer science and various other fields. It also offers a master's degree in computer science education for teachers.

The Department of Computer Science does not currently offer a doctoral program. Doctorates in numerical analysis and combinatorics are available through the Department of Mathematics.

A doctorate in computer science education is available through the College of Education. A doctorate involving considerable work in computers in business is available through the College of Business Administration. All of these programs allow and encourage the inclusion of substantial coursework from the Department of Computer Science.

Candidates for admission to a master's degree program should have included substantial work in computing in their undergraduate program; however, an undergraduate degree in computer science is not required. The
master's degree requires 45 credit hours of work at the graduate level. Students without the equivalent of an undergraduate major in computer science will ordinarily require two full years of graduate work to complete a master's degree. Students with the equivalent of an undergraduate major in computer science will ordinarily require four terms (one of which may be summer) to complete a master's degree.

Additional details on master's degree programs, as well as application forms for admission to the program, are available from the department. General information concerning graduate work is available in the Graduate School section of this catalog.

## Undergraduate Courses

CS 121. Concepts of Computing. 3 credit hours. A survey of the capabilities, limitations, and implications of computers; designed as a general-interest introduction to the field. The course includes an introduction to programming in time-shared basic. No prerequisite.
CS 131. Introduction to Business Data Processing. 4 credit hours. First term of the sequence CS 131, CS 331. Basic principles of busines data processing and programming using the language BASIC. Examples and applications will be taken from the area of Business Data Processing. Prerequisite : Mth 101 or equivalent.
CS 133. Introduction to Numerical Computation. 4 credit hours. Basic concepts of problem analysis and computation ; programming a computer using the language fortran. Prerequisite : Mth 101 or equivalent.

## CS 150. Selected Topics in Computer

 Science. 3 credit hours. Subjects of general interest covering computer applications, with emphasis upon current and potential capabilities and limitations of computers, and social, vocational, and educational implications of computers. Content will vary from term to term, with topics to include computer graphics; modeling and simulation ; information storage and retrieval. Prerequisite: The normal prerequisite will be CS 121 or equivalent. However, certain selected topics will have other prerequisites, such as CS 133 or equivalent.CS 199. Special Studies in Computer Science. Credit hours and topics to be arranged. Topics offered vary with the interests and needs of students and faculty. Typical subjects offered have included: Self-instruction fortran; Self-instruction flecs; Environmental Modeling and Simulation. CS 201, 202, 203. Introduction to Computer Science. 4 credit hours each term. A year-long sequence for majors and others seriously interested in Computer Science. CS 201 covers introductory programming, program structuring, and an introduction to the nature of computers. CS 202 provides a description of data structureswith applications in game playing, compiling, business data processing and numerical methods. CS 203 studies the file maintenance and job sequencing operations provided by the PDP-10 and IBM- 360 operating systems. Use of the time sharing system is covered with an introduction to the language snobol. Prerequisite : four years of high-school mathematics, or Mth 101,
or consent of instructor. Students having taken CS 133 may enter CS 202 by simultaneously taking CS 199 Self-instruction FLECS. Students having taken CS 245 and CS 333 may enter the major sequence by taking CS 203.

## CS 245. Introduction to Time-Shared

Computing. 2 credit hours. An introduction to time-shared computing on a large timeshared computer. Command language ; use of an editor to create files; manipulation of files ; programming in several time-shared languages. Prerequisite: CS 201 or CS 133, or equivalent knowledge of programming in a batch-processing mode. A no-grade course.
CS 301. Intermediate Computer Science: Machine Organization and Structure. 4 credit hours. Introduction to digital logic, machine organization, structure and instruction sets. Assembly language programming. First term of the second year sequence for computer science majors. Prerequisite: CS 203 or equivalent.
CS 302. Intermediate Computer Science: Data Structures. 4 credit hours. Concepts of data organization, methods of representing data in storage, techniques for operating upon data structures. Second term of the second year sequence for computer science majors. Prerequisite: CS 203 or equivalent and Mth 232 as prerequisite or corequisite.
CS 303. Intermediate Computer Science: Programming Methodology. 4 credit hours. Structured programming, program verification, and algorithm analysis. Third term of second year sequence for computer science majors. Prerequisite: CS 302.
CS 331. Business Data Processing. 4 credit hours. Second term of the sequence CS 131, CS 331. Introduction to the programming language cobol ; fundamentals of business data processing. Prerequisite : CS 131 or CS 133 or CS 201.
CS 333. FORTRAN in an Operating Environment. 4 credit hours. Capabilities and limitations of a complete FORTRAN IV system. Prerequisite: CS 133 or equivalent.
CS 403. Thesis. Credit hours to be arranged.
CS 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

CS 407. Seminar. (G) Credit hours to be arranged. Seminar to allow small groups of students to study fur ther the material of an upper-division course or to study in greater depth specific topics arising out of other courses. The seminars offered vary according to the interests and needs of students and availability of faculty; not all of the seminars offered will be suitable for CS graduate majors. Typical subjects offered are: Computers for Laboratory Control Computer Installation Management Computer Simulation
Mini-computers
CS 409. Supervised Tutoring. (G) 1-2 credit hours. The student assists other students who are enrolled in introductory programming classes. For each three hours of scheduled, weekly consulting the student is awarded one hour of credit. A weekly meeting is held to discuss the tutoring process. Prerequisite : knowledge of BASIC, FORTRAN, FLECS, cobol, or pascal. No more than 4 credits may be earned by any student. Graded Pass/ No-Pass only.

CS 410. Experimental Course. (G) Credit hours to be arranged. New regular courses will normally be offered under this number the first year or two, before final definition of the course and subsequent University approval.
CS 411. Introduction to Analysis of Algorithms. (G) 4 credit hours. Definitions of algorithms and presentation of different formalisms to describe them. Models of computations (Turing machine, finite automata). Problem solving tools-mathematical induction, recurrence relations, generating functions -in analysis of algorithms. Prerequisite : CS 303.
CS 423. Programming Practicum. (g) 4 credit hours. Experience in the computerprogramming process. Emphasis on improving the quality of programs written. Program design, optimization, conventions, debugging. documentation; includes programming a sizeable project. Admission usuallv restricted to CS majors. Prerequisite: CS 302 or equivalent.
CS 424. Assembly Language Programming,
(g) 4 credit hours. Machine organization and structure, representation of data, I/o operations, interrupts, and instruction sets.
Labs will be directed toward understanding basic notions of data structures. Prerequisite: CS 301 or equivalent.
CS 428, 429. Computer Systems. (G) 4 credit hours each term. Functional structure of computers and detailed structural analysis of operating systems. Properties and components of monitors, evolution of systems from sequential to multiprogramming, advances in operating systems related to integrated hard-ware-software design and time-sharing. Study of real-time monitors, input-output, interrupt systems, multiprocessing, and file organization. Prerequisite for CS 428 is CS 302 or equivalent, for 429 it is CS 428 or consent of instructor.
CS 430. Systems Programming. (G) 4 credit hours. Study of advanced operating systems with emphasis upon the examination of the interrelationships of hardware and software components for a single system. Prerequisite : CS 429 ; consent of instructor is required.
CS 431. Business Data Processing. (g) 4 credit hours. An advanced course in cobol programming and analysis of business systems from a computer science point of view. Intended for students with a professional interest in cobol programming. Prerequisite : 12-16 hours of computer science including CS 331 ; consent of instructor required.
CS 435. Business Data Processing Systems.
(G) 4 credit hours. Study of designs of some business data processing systems and the systems analysis process. Development of skills in systems analysis and systems design. Prerequisite: CS 331 and CS 302.
CS 441. Computer Graphics. (g) 4 credit hours. Introduction to the use of computers for input, manipulation, and display of graphical information. Types of display hardware and underlying principles. Graphical input methods and interactive graphics. Survey of applications. Display of curves and 3-dimentional surfaces; hidden line and surface elimination ; shading ; rotation. Hands-on use of available graphic equipment and software. Prerequisite: CS 302.
CS 445. Simulation. (G) 4 credit hours.
Theoretical foundations for the modeling and computer simulation of discrete and continuous systems. Projects making use of currently available simulation languages such as SIMULA or GPSS. Prerequisite : CS 302.

CS 447. Computer Assisted Experimentation. (g) 4 credit hours. An introduction to the use of computers for data acquisition and experimental control. Prerequisite : CS 201, CS 133, or equivalent. Will not be offered 1978-79.
CS 451. Information Retrieval. (G) 4 credit hours. An introduction to the use of computers for storing, selecting, and retrieving data.
Physical storage devices, data-base organization, safety and recovery, sorting and searching, privacy and security, commercial systems. Prerequisite: CS 302, or consent of instructor.
CS 461. Computing Techniques for Statistical Analysis. (g) 4 credit hours. For advanced undergraduates and graduate-level students with statistical or social science backgrounds and interests. Views computing as a tool which is used in statistical data a nalysis, simulation and graphic display. A useful third course to follow CS 133 and CS 333. Prerequisite: CS 333 or equivalent, and at least two terms in statistics or research methods.
CS 472, 473. Computers in Education. (g) 4 credit hours each term. Designed primarily as service courses for advanced undergraduate and graduate students in the field of education. A study of applications and implications of computers in education, including substantial work with the programming language basic and computer-based curriculum materials. Prerequisite : One CS course (CS 121 is recommended), or consent of instructor.

## Graduate Courses

CS 503. Thesis. Credit hours to be arranged. No-grade course.
CS 505. Reading and Conference. Credit hours to be arranged.
CS 507. Seminar. Credit hours to be arranged. Seminars offered vary according to the interests and needs of students and availability of faculty. Typical subjects offered are: Computer Graphics
Analysis of Business Systems
Computer Logic Design
Computers in Education
Scene Analysis
Microprogramming
Topics in Artificial Intelligence
CS 510. Experimental Course. Credit hours to be arranged. New regular graduate courses will normally be offered under this number the first year or two, before final definition of the course and subsequent University approval. CS 521, 522. Theory of Computation. 4 credit hours each term. Structure and behavior of finite and infinite machines; formal languages and syntactic analysis; relationship between formal languages and machines; Turing machines, computability, and undecidability ; computational complexity. Prerequisite: CS 411 or equivalent.
CS 524, 525. Structure of Programming Languages. 4 credit hours each term. Syntax and semantics of programming languages ; formal representation of computational processes, formal representation of
grammars and related parsing methods, comparison and design of programming languages. Prerequisite: CS 302 or equivalent CS 526. Compiler Construction. 4 credit hours. Techniques involved in the analysis of source-language statements and the generation of object code. Some theory ; emphasis on construction of compilers. Prerequisite CS 525 .
CS 571. Artificial Intelligence. 4 credit hours. Basic ideas and goals of artificial intelligence. Heuristic methods and programming techniques. State space search methods. Survey of representative application areas such as pattern recognition, theorem proving, game playing, natural language comprehension, cognitive simulation. Prerequisite CS 302, or consent of instructor.
CS 573. Pattern Recognition. 4 credit hours. Methods of pattern recognition including basic sets of recognition techniques and descriptive techniques. A number of extant systems which employ these methods will be studied. Prerequisite : CS 571. Offered in alternate years, alternating with CS 575 .
CS 575. Natural Language Processing. 4 credit hours. Problems associated with the acquisition, representation, and appropriate utilization of knowledge by programmed systems. Suitable contexts for language processing systems are defined, and the outline of an understanding system for a chosen context is developed. Prerequisite : CS 571. Offered in alternate years, alternating with CS 573.


# East Asian Languages 

## Faculty

Michael B. Fish, Ph.D., Department Head, Assistant Professor of Chinese (T'ang and earlier literature). B.A., Knox College, 1965 ; M.A., 1968, Ph.D., 1973, Indiana. (On leave 1978-79).
Angela Jung, Ph.D., Professor of Chinese (classical and modern Chinese literature). B.A., Catholic University of Peking, 1946 ; M.A., 1949, M.L.S., 1954, Ph.D., 1955, Washington. (Acting Dept. Head 1978-79.) Stephen W. Kohl, Ph.D., Assistant Professor of Japanese (modern and classical Japanese literature). B.A., 1967, Ph.D., 1974, Washington. Yolvo M. McClain, M.A., Instructor of Japanese (modern Japanese language and literature). Diplona Tsuda College, Tokyo, 1950 ; B.A., 1956, M.A., 1967, Oregon. (On leave 1978-79.) Yoshivuki Nakai, Ph.D., Assistant Professor of Japanese (modern and classical Japanese literature). B.A., 1962, M.A., 1964, Tokyo University; M.A., 1968, Pl.D., 1974, Harvard.
Lucia Yang, Ph.D., Assistant Professor of Chinese (Chinese language and linguistics). B.A., San Francisco State, 1967 ; M.S., 1970, Ph.D., 1975, Georgetown.

The department offers undergraduate programs in Chinese and Japanese language and literature.

The aim of the programs is to enable a student to achieve proficiency in reading, writing, and speaking the language and to acquire a fundamental knowledge of the literature of the country.

Students considering a major in Chinese or Japanese are advised to decide upon their major at the earliest possible stage of their university career, so that they are able to satisfy the requirements in the usual four years of undergraduate study. Background in languages, literature, or history at the high school or community college level will constitute good preparation for the major.

## Major Requirements

Major requirements for the Bachelor of Arts degree are as follows:

Chinese. Thirty-nine credit hours àre required in courses beyond the secondyear level, including the Introduction to Chinese Literature (Chn 307, 308, 309) , Contemporary Chinese (Chn 414, 415, 416), and Advanced Readings in Modern Chinese Literature (Chn 420,
$421,422)$. The remaining credit hours may be earned in other upper-level Chinese language, literature, and linguistics courses. Students are encouraged to take courses involving Chinese culture in other disciplines, such as history, religion, and art history.

Japanese. Thirty-nine credit hours are required in courses beyond the second-year level, including the Introduction to Japanese Literature (Jp1 301, 302, 303), Contemporary Japanese ( Jpn 411, 412, 413), and Advanced Readings in Modern Japanese Literature (Jpn 417, 418, 419). The remaining credit hours may be earned in any other upper-level Japanese language and literature courses. Students are encouraged to take courses involving Japanese culture in other disciplines, such as history, religion, and art history.

Any course for which a grade of $D$ is received will not count toward the major.

## Chinese

## Undergraduate Courses

Chn 50, 51, 52. First-Year Chinese. 5 credit
hours each term. An introduction to Mandarin : initial conversation, reading, and writing. Characters and spoken language presented concurrently throughout the year with emphasis on grammatical patterns. Yang. Chn 101, 102, 103. Second-Year Chinese. 5 credit hours each term. The increased use of characters; designed to build fluency in reading, writing, and conversation.
Chn 199. Special Studies. 1-3 credit hours.
Chn 307, 308, 309. Introduction to Chinese Literature. 3 credit hours each term. A survey of traditional Chinese literature from the earliest poetry anthologies to the novels of the late nineteenth century. Fall readings include selections from the Books of Songs, Songs of Ch'u, Chuang-tzu, the histories, prose-poems of the Han, and poetry of the Six Dynasties ; in Winter special attention is paid to T'ang and Sung poetry, to the supernatural tales of the Six Dynasties, the literary tales of the T'ang and the Sung storytellers; and Spring readings cover Yuan drama. Ming short stories, and novels of the Ming and Ch'ing, such as Monkey, Drcam. of the Red Chamber, and The Travels of Lao Ts'an. All readings are in English.
Chn 330, 331, 332. Chinese Composition and Conversation. 3 credit hours each term. Exercises in writing Chinese and in translating English into Chinese. Systematic review of grammar and development of conversational proficiency. Prerequisite : two years' study of Chinese, or consent of instructor. Yang.
Chn 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

Chn 407. Seminar. Credit hours to be arranged.
Chn 414, 415, 416. Contemporary Chinese. (g) 3 credit hours each term. Study of con-
temporary Chinese literature to increase reading ability in modern writing styles (e.g., documentary and journalistic).
Chn 421, 421, 422. Advanced Readings in Modern Chinese Literature. (g) 3 credit hours each term. Readings from the prose and poetry of representative modern authors, including Lao Sheh, Lu Hsun, and Kuo Mo-jo. Emphasis on increasing the student's knowledge of the language and the literature. Consent of instructor is required. Jung.
Chn 423, 424, 425. T'ang Poetry. (g) 3 credit hours each term. Comprehensive study of T'ang dynasty poetry : critical analysis and appreciation of works of major poets of the period, including Li Po, Wang Wei, Tu Fu, Po Chu-yi, and Li Shang-yin. Consent of instructor is required. Offered alternate years. Fish.
Chn 436, 437, 438. Literary Chinese. (g) 3 credit hours each term. Readings in various styles and genres of classical Chinese literature ; stress on major works of different periods. A preparation for research. Offered alternate years. Fish. Not offered 1978-79.

## Chn 440. History of the Chinese Language.

(g) 3 credit hours. A study of the historical development of the Chinese language in different linguistic aspects : phonological, morphological, syntactic, and orthographic. Prerequisite: two years of Chinese, or consent of instructor. Yang.
Chn 441. Applied Chinese Phonetics. (g) 3 credit hours. An examination of the articulatory basis of the Chinese pronunciation and an analytical study of the major forms of the Chinese language. Prerequisite : one year of Chinese, or consent of instructor. Yang.
Chn 442. Chinese Morphology and Syntax.
(g) 3 credit hours. Description of morphemes and word formation, application of linguistic techniques, such as tagmemics and transformation, to the analysis of Mandarin Chinese. Prerequisites: one year of Chinese, or Linguistics 290. Yang.
Chn 443. Semantic Structure of Chinese. (g) 3 credit hours. Introduction and application of modern semantic theories, such as case grammar, to the analysis of the Chinese language. Prerequisite : one year of Chinese, or Linguistics 290. Yang.
Chn 445. Chinese Dialects. (g) 3 credit hours. A comparative study of the major dialects in Chinese, their historical origins, and their phonological and syntactic characteristics. Prerequisite : two years of Chinese, or consent of instructor.
Chn 453. Chinese Bibliography. (g) 2 credit hours. Examination of reference works in Chinese studies, covering Western sinology, major sources in Chinese, and training in research methods. Prerequisite : two years' study of Chinese, or consent of instructor. Fish. Not offered 1978-79.
Chn 461. The Chinese Classics. (g) 3 credit hours. An examination of the Confucian and Taoist canons which are considered the main body of ancient Chinese literature and major sources of Chinese thought and culture. All readings in English. Not offered 1978-79.

## Chn 462. Twentieth Century Chinese

 Literature. (g) 3 credit hours. A comprehensive study of the literature from the May Fourth Movement of 1919 to the present day. Western influences on the various literary genres and continuity of the tradition are traced. Major works of the 20 th century are analyzed in terms of the aesthetic, social, and political significance. All readings in English. Jung.
## Japanese <br> Undergraduate Courses

Jpn 60, 61, 62. First-Year Japanese. 5 credit hours each term. An introduction to Japanese : elementary reading, writing, and conversation. Stress on grammatical patterns and the presentation of characters and the syllabary.
Jpn 104, 105, 106. Second-Year Japanese. 5 credit hours each term. The increased use of characters and grammatical patterns; designed to build fluency in reading, writing, and conversation. Nakai.
Jpn 301, 302, 303. Introduction to Japanese Literature. 3 credit hours each term. Historical survey of Japanese literature from the Eighth Century to the present. Analysis and appreciation of major works, authors, and genres, such as the Manyoshu, The Tale of Genji, Saikaku, and the Haiku. All readings in English. Nakai, Kohl.
Jpn 327, 328, 329. Japanese Composition and Conversation. 3 credit hours each term. Exercises in writing Japanese and in translating English into Japanese. Systematic review of grammar and development of conversational proficiency. Prerequisite: two years' study of Japanese, or consent of instructor. Jpn 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses <br> Carrying Graduate Credit

Jpn 407. Seminar. (g) 3 credit hours. Japanese literature both in Japanese and in English translation. Kohl, Nakai. Jpn 411, 412, 413. Contemporary Japanese. (g) 3 credit hours. Advanced readings in modern documentary and literary Japanese, and use of standard reference materials. Kohl.
Jpn 417, 418, 419. Advanced Readings in Modern Japanese Literature. (g) 3 credit hours each term. Reading of prose works of representative modern authors, including Shimei, Ogai, Soseki, Akutagawa, Tanizaki, Kawabata. Consent of instructor is required. Nakai.
Jpn 426, 427, 428. Literary Japanese. (g) 3 credit hours each term. Readings in various styles and genres of Japanese prose literature in premodern periods. A preparation for research. Offered alternate years. Kohl. Jpn 433, 434, 435. Japanese Poetry. (g) 3 credit hours each term. Critical analysis and appreciation of Japanese poetry through reading of works in different forms and of different periods. Prerequisite : two years' study of language, or consent of instructor. Offered alternate years. Nakai, Kohl.
Jpn 450. Japanese Bibliography. (g) 2 credit hours. Bibliography for Japanese studies: examination of basic reference works in both Western languages and Japanese and training in research methods. Prerequisite: two years' study of Japanese, or consent of instructor. Kohl.


## Economics

Faculty
Henry N. Goldstein, Ph.D., Department Head, Professor of Econonnics (international finance). B.A., North Carolina, 1950 ; M.S., 1953, Ph.D.. 1967. Johns Hopkins.
C. Ross Anthony, Plı.D., Assistant Professor of Economics (economic development, health economics). B.A., Williams, 1968; M.A.. 1974, Ph.D., 1978, Pennsylvania.
Gerald O. Bierzag, Ph.D., Professor of Economics (econometrics). B.A., Idaho, 1958 ; Ph.D., Northwestern, 1962.

Robert Campbell, Ph.D., Professor of Economics (history of thought). B.A.. Berkeley, 1947 ; B.S.. U.S. Merchant Marine Academy, 1960 : Ph.D., Berkeley, 1953.
Richard M. Davis, Ph.D., Professor of Economics (economic theory). B.A., Colgate, 1939 ; M.A., 1941, Pl.D.. 1949, Cornell.
Randall W. Eberts, Ph.D., Assistant Professor of Economics (regional economics and econometrics). B.A., San Diego, 1973 ; M.A., 1975, Ph.D., 1977, Northwestern.
Myron A. Grove, Ph.D., Professor of Economics (economic theory, mathematical economics). B.S., 1957, M.S., 1959, Oregon ; Ph.D.. Northwestern, 1964.

Stephen E. Haynes, Ph.D., Assistant Professor of Economics (international finance and econometrics). B.A., 1968, Ph.D., 1976, California, Santa Barbara. Chulsoon Khang, Ph.D., Professor of Economics (pure theory of international trade). B.A., Michigan State, 1959 ; M.A., 1962, Ph.D., 1965, Minnesota.
H. T. Koplin, Ph.D., Professor of Economics (economic theory, public finance). B.A., Oberlin, 1947 ; Ph.D., Cornell, 1952.
Raymond F. Mikesell, Ph.D., W. E. Miner Professor of Economics (international economics and economic development). B.A., 1935, M.A., 1935, Ph.D., 1939, Ohio State.
Barry N. Siegel, Ph.D., Professor of Economics (monetary theory). B.A., 1951, Ph.D., 1957, California.
Margaret H. Simeral, Ph.D., Assistant Professor of Economics (labor and manpower economics). B.A., Southern California, 1969; Ph.D., Claremont, 1975.

Paul B. Simpson, Ph.D., Professor of Economics (mathematical economics). B.A., Reed, 1936 ; Ph.D., Cornell, 1949.

Robert E. Smith, Ph.D., Professor of Economics (industrial organization and public policy and the multinational corporation). B.A., Southern California, 1943 : Plı.D., California at Los Angeles, 1963.
James N. Tattersall, Ph.D., Professor of Economics (economic history). B.A., 1954, M.S., 1956. Ph.D.. 1960. Washington.
Alden L. Toevs, Ph.D., Assistant Professor of Economics (natural resources and applied econometrics). B.S., Lewis and Clark, 1971 ; Ph.D., Tulane, 1975.
Marshall D. Wattles, Ph.D., Professor of Economics ; Vice-Provost for Academic Administration. B.A., Southwest Missouri State. 1938 : M.A.. Missouri, 1941 ; Ph.D., Ohio State, 1950.
W. Edzeard Whitelaze, Ph.D., Associate Professor of Economics (urban economics). B.A., Montana, 1963 : Ph.D., Massachusetts Institute of Technology, 1968.

Faculty Emeriti
Corzcin D. Edzerards, Plı.D., Professor Emeritus of Economics. A.B.. 1920, B.J., 1921, Missouri; B.Litt., Oxford, 1924 ; Ph.D., Cornell, 1928 ; at Oregon since 1963.
Paul L. Kleinsorge, Ph.D., Professor Emeritus of Economics. A.B., Stanford, 1927 ; M.B.A., Harvard, 1929; Ph.D., Stanford, 1939; at Oregon since 1948.

## Undergraduate Studies

The Department of Economics offers undergraduate work leading to a baccalaureate degree. Students doing outstanding work in their major program may be eligible for clepartmental Honors. The undergraduate courses in economics are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Ars and Sciences. They are also designed to give a substantial foundation in economics to students inerested in (1) professional careers in business, law, and government, (2) secondary school teaching, and (3) professional graduate training in economics.

Suggested preparation for entering freshmen is four years of high school mathematics. Prospective majors are strongly urged to satisfy part of their science group requirement with an introductory calculus course, to be taken in the freshman or sophomore year. Suggested preparation for twoyear college transfers is the equivalent
of Ec 201, 202 and the equivalent of Mth 207. 208, 209 or Mth 201, 202, 203.

## Major Requirements

The following courses are required for an mindergraduate major in economics:
(1) Intermediate Economic Analysis (Ec 375, 376, 377 or Ec 475, 476, 477) ; (2) Introduction to Statistical Theory (Mith 441, 442) or Introduction to Econometrics (Ec 420, 421), or Econometrics (Ec 493) ; (3) 27 additional credit hours of work in economics numbered 300 or above, no more than 3 of which may be in Ec 409 Practicum.

## Program Suggestions for Majors

(1) Normally, all major students should plan to complete the two required sequences (Ec 375, 376, 377. and Ec 420,421 ) by the end of their junior year.
(2) Preprofessional major students should consult advisers in their intended professional school for recommendations.
(3) Major students planning graduate study in economics should take Mth 201, 202, 203 or Mth 207, 208, 209 before the end of their second year and include additional work in mathematics and statistics. Prospective graduate stuclents and others with an appropriate mathematical backgromed should satisfy their intermediate theory requirement with Ec 475, 476, 477 instead of Ec 375, 376, 377.

## Secondary School Teaching

The Department of Economics offers work to prepare persons to teach the social studies in Oregon public secondary schools. Certification as a secondary teacher with the social studies. enclorsement requires satisfactory completion of a program of teacher preparation which includes subject matter preparation in the social sciences, and in professional eclucation, plus recommendation of the institution in which the preparation is completed. The department offers work toward initial or Basic certification and toward Standard certification. The University's program to prepare social studies teachers is subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission, effective January 1, 1980. For specific information regarding department requirements for the social studies endorsement, stuclents should contact the departmental norm adviser for Teacher Education, and the Office of Secondary Education in the College of Education.

## Graduate Studies

The Department of Economics offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. General information about graduate work at the University of Oregon is available in the Graduate School section of this catalog A detailed description of departmental degree requirements may be obtained from the department office.

Applicants for admission must submit the following to the department: (1) scores in the Graduate Record General Aptitude Examination and the Advanced Test in Economics; (2) three letters of recommendation; (3) complete transcripts of previous work. Applicants whose native language is not English must also submit their score in the Test of English as a Foreign Language.

## Master's Degree

The Department of Economics offers a master's degree program for students wishing to teach in two-year or other colleges willing to hire people with master's degrees, and for students who want research careers. The program requires a minimum of 45 hours of graduate credit and students must meet the other University and Graduate School requirements for the degree. In addition, students must meet the following departmental requirements: knowledge in mathematics equivalent to that contained in Mth 207, 208 or a higher level calculus course; knowledge in statistics and econometrics equivalent to that contained in Ec 420, 421 at the graduate credit level, or Ec 493, 494 ; appropriate work in micro- and macroeconomic theory equivalent to that contained in Ec 475, 476, 477 ; completion of an acceptable research paper, or, alternatively, a thesis approved by at least two staff members of the department. Students must maintain a minimum GPA of 3.00 on all graduate work undertaken and must complete all requirements for the degree within five years after beginning graduate work in economics at the University of Oregon.

## Doctor of Philosophy degree

Every graduate student seeking the Ph .D. degree must satisfactorily complete a first-year core program, including required work in micro- and macroeconomic theory seminars (Ec 507) and econometrics (Ec 493, 494, 495). Students must pass an examination over this core program before continuing with the second year of the Ph.D. program.

An advisory committee is appointed for each student to guicle the student in the second year of study, after the core examination is passed. Work in the second year will empliasize area and research seminars appropriate for the student's dissertation research interests. When the student has successfully completed the second year requirements established by the advisory committee, including the submission of an acceptable prospectus for the dissertation project, the student will be advanced to candidacy. Following this stage in the program, the student will be guided by a dissertation committee. At the option of the student, a master's degree may be awarded upon advancement to candidacy for the Plo.D. degree.

Detailed requirements are currently under review and revision. Students are advised to apply to the department for information.

## Undergraduate Courses

Ec 199. Special Studies in Economics.
Ec 201. Introduction to Economic Analysis: Microeconomics. 3 credit hours. Topics may include : scarcity ; comparative advantage ; exchange ; consumer choice; theory of the firm; supply and demand; price and output under competition and monopoly ; market failures and public policy; theories of wages, profits, rent.
Ec 202. Introduction to Economic Analysis: Macroeconomics. 3 credit hours. Topics may include: national income accounting; determinants of national income ; employment and unemployment ; monetary system ; inflation and recession; Federal Reserve System and monetary policy ; fiscal policy ; management of the public debt ; balance of payments ; world monetary system; economic growth.
Ec 203. Special Topics in Economics. 3 credit hours any term. A selection of topics applying the tools developed in Ec 201 and/or 202 to major economic issues and problems. Topics offered have included: Unemploy-ment-Inflation Dilemma, Economics and the Quality of the Environment, Economics of Poverty, Images of Capitalism, A Critique of Radical Economics, Urban America, Economic Problems of the Third World, Gold and the Dollar. Prerequisite : Either Ec 201 or Ec 202, depending upon topic. May be repeated for credit.
Ec 321. Money and Banking. 3 credit hours fall. Operations of commercial banks, the Federal Reserve System, and the Treasury that affect the United State monetary system. Prerequisite : Ec 201 and 202. Siegel.
Ec 322. Taxation and Fiscal Policy. 3 credit
hours winter. Principles and problems of government financing. Expenditures, revenues, debt, and financial administration. Production by government versus production by the private sector. Tax measures to control externalities. Prerequisite: Ec 201 and 202. Eberts.
Ec 323. International Finance. 3 credit hours spring. The nature of foreign-exchange markets ; techniques of international payments ; exchange rates and their determination; problems of an international monetary standard ; international banking facilities; economic aspects of major international
organizations. Prerequisite: Ec 201 and 202. Goldstein, Haynes or Eberts.
Ec 375, 376, 377. Intermediate Economic Analysis. 3 credit hours each term. First term : income and employment theory. Second term : theory of the consumer ; theory of the firm; determination of prices in various kinds of markets. Third term: general equilibrium; welfare economics; collective choice and rules for evaluating economic policy. Prerequisite : Ec 201 for Ec 376, Ec 202 for Ec 375, Ec 376 for Ec 377. College algebra is required for Ec 375 or 376 , and one or more terms of calculus are recommended.
Ec 401. Research. Credit hours to be arranged.
Ec 405. Reading and Conference. Credit hours to be arranged.
Ec 409. Supervised Tutoring Practicum. $1-3$ credit hours.

## Upper-Division Courses Carrying Graduate Credit

Ec 407. Seminar. (G) Credit hours to be arranged. Opportunity for small groups of students to pursue further the subject matter of an upper-division course or to explore in depth a specific topic arising out of material covered in a course. The seminars offered vary from year to year, depending upon interests and needs of students and upon availablity of faculty. Typical offerings are:
Welfare Economics. Koplin.
International Economic Agencies. Mikesell. Benefit Cost Analysis. Simpson.
Public Expenditure Economics. Tattersall.
Ec 411. Monetary Policy. (G) 3 credit hours. Nature and role of money ; commercial banking system; Federal Reserve System; theory of credit and money supply control; Keynesian and monetarist theories of national income determination and inflation. Prerequisite : Ec 375. Siegel.
Ec 412. Monetarist Economics: Theories and Evidence. (G) 3 credit hours. Commercial bank behavior and monetary control ; nonbank financial intermediaries and the problem of monetary control of "free reserves" and other indicators and targets of monetary control ; fiscal policies versus monetary policies as tools for economic stabilization. Prerequisite : Ec 321 or Ec 411. Siegel.
Ec 413. Money and Credit Markets. (G) 3 credit hours. Credit markets ; mortgage markets and construction; money flow studies; insțitutional lending policies; theories of interest; term structure of interest rates; interest rates and the demand for money; role of interest in social investment policy. Prerequisite : Ec 321 or Ec 411.
Ec 414. Regional Economics. (G) 3 credit hours. Location theory ; interregional multiplier theory ; regional growth ; techniques of regional analysis : regional income accounting, economic base studies, input-output analysis, linear programming ; regional and interregional models. Prerequisite : Ec 201 ; Mth 207, 208, or equivalent. Eberts.
Ec 415. Urban Economics I. (G) 3 credit hours. Location theory, urbanization and metropolitan growth; intra urban rent, location and land use ; size distribution of urban areas; welfare economics, political economy and urban problems. Prerequisite : Ec 201; Mth 207, 208, or equivalent are recommended. Whitelaw.
Ec 416. Urban Economics II. (G) 3 credit hours. Problems of race and poverty in the city; urban education systems, defacto segregation, and equality of educational opportunity ; housing, residential segregation, slums
and urban renewal; urban transportation ; financing local government ; urban crime; pollution and environmental quality ; urban planning and normative models of the city. Prerequisite: Ec 415. Whitelaw.
Ec 417. Contemporary Economic Problems. (g) 3 credit hours. Contemporary economic conditions and problems; analysis of economic policies and practices affecting such problems.
Ec 418. Economy of the Pacific Northwest. (g) 3 credit hours. Historical development and present industrial structure of the Pacific Northwest economy. Locational factors influencing development of the region's major industries; recent changes in income and population; analysis of problems and governmental policies in the areas of taxation, environment, and planning.
Ec 420, 421. Introduction to Econometrics. (G) 4 credit hours each term. Survey of elementary econometric methodology and empirical work in econometrics. Covers economic applications of statistical theory, regression, and correlation analysis. Use of calculator and computer required. Must be taken as a two-term sequence. Prerequisite : Ec 201 and 202, and the equivalent of college algebra. Grove.
Ec 429, 430, 431. Public Finance. (G) 3 credit hours each term. Fall and winter : the place of public finance in economic policy; rationale of the public sector; models of the optimal public budget; impact of the public budget on individual economic decisions; detailed consideration of the principles of taxation and expenditure ; analysis and comparison of various forms of taxation; government enterprise. Spring : fiscal aspects of stabilization policy ; impact of the public budget on the total levels of economic activity. Prerequisite : Ec 201 and 202. Should be taken in sequence.
Ec 432, 433, 434. The Economics of Public Policy. (G) 3 credit hours each term. Application of economic principles and techniques to public policy issues; function of the economist in the formulation and implementation of public policy. Case studies involving systematic treatment of economic issues. Whitelaw.
Ec 440, 441, 442. International Economics. (G) 3 credit hours each term. First term : the nature and significance of the foreign exchange market; interaction between spot and for ward markets; speculation and interest arbitrage ; balance-of-payments accounting and alternative measures of payments deficits and surpluses; different ways to deal with a payments deficit. Second term: institutional arrangements to generate international liquidity ; the role of the International Monetary Fund; special drawing rights ; the pros and cons of flexible exchange rates; recent experience with managed floating. Third term : the "pure" theory of international trade; determination of the direction of trade, international prices, the volume of goods traded; the effects of tariffs, quotas, customs unions, and common markets; the effects of free and restricted trade on economic welfare. Should be taken in sequence. Prerequisite : Ec 201 and 202. Recommended : Ec 375 and 376. Haynes.

Ec 444. Labor Economics. (G) 3 credit hours. An analysis of the operation and political economy of labor markets with particular emphasis on the implications of a market system for wage determination and the nature of material production. General outline of topics: supply and demand for labor, wage determination under various market structures, low-wage labor markets, segmentation, the role of trade unions, wage differ-
entials, discrimination, and the nature of work. Prerequisite: Ec 201 ; recommended: Ec 376. Simeral.
Ec 445. Issues in Labor Economics. (G) 3 credit hours. Analysis of current problems associated with labor markets in advanced industrial countries. Topics include theories of unemployment, alienation, inequality, human resources, and the impact of unions. Special attention will be given to economic policy affecting labor markets, particularly policies and institutions relating to unemployment. Prerequisite : Ec 201 and Ec 202.

## Simeral. Not offered in 1978-79.

Ec 446. Collective Bargaining and Public Policy. (G) 3 credit hours. Historical and analytical treatment of collective bargaining and public policy affecting unions. Covers current status of trade unions, history of the labor movement, industrial-relations legislation, economics of collective bargaining. Special topics include labor and globalcorporations, labor-movement strategies, unions and minorities, scope of collective bargaining, and union democracy. Prerequisite : Ec 201. Simeral.
Ec 447, 448, 449. Collective Bargaining. (G) 2 credit hours each term. Major techniques of negotiation; union and management policies; strike and lockouts. Methods of setling labor disputes, including grievance procedures, conciliation, fact finding, and arbitration. Not offered 1978-79.
Ec 450. Marxian Economics. (G) 3 credit hours. Marx's theory of the working of the economic system, primarily as developed in the Communifest Manifesto and Capital. Readings in Marx are accompanied by modern writings designed to describe the Marxian system in the language of contemporary economics. Prerequisite: Ec 201 and 202. Recommended: Ec 375, 376. Davis.
Ec 451. Planned Economies. (G) 3 credit hours. Theory of centralized and decentralized economic planning. Studies in the operation of planned economies, primarily in Eastern Europe. Prerequisite: Ec 201 and 202. Recommended: Ec 375, 376. Davis.
Ec 454, 455, 456. Economic History of Modern Europe. (G) 3 credit hours each term. The economic development and economic institutions of modern Europe. Fall: from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain ; winter : late eighteenth century to end of nineteenth century; spring: twenticth century.
Ec 457, 458, 459. Economic Development. (G) 3 credit hours each term. Experience of developed countries and theories of development. Policy ingredients of development programs: role of agriculture; sources of finance; techniques and strategy of investment planning. Prerequisite : Ec 201, 202. Not offered in 1978-79.
Ec 460. The Economics of Industrial Organization. (G) 3 credit hours. A survey and evaluation of the theories, quantitative measures, and institutional descriptions associated with the structure, conduct, and results that characterize American industry. The emphasis is on the determinants and consequences of market power. Smith. Ec 461. Industrial Organization and Public Policy. (G) 3 credit hours. A description and critique of the major policy instruments that have been developed to cope with social problems created by market power. The two principal instruments are antitrust and income policies. Smith.
Ec 462. The Multinational Corporation.
(G) 3 credit hours. Analysis of market power in international trade covering cartels,
licensing arrangements, multinational corporations, and relevant national and international policy considerations. Smith.
Ec 463. Economics of Regulated Industries. (G) 3 credit hours. An analysis (1) of the economic characteristics of industries in which the decision-making process is regulated by government administration rather than by market forces, (2) of the consequences of regulation, and (3) of alternate forms of social control. The industries usually covered include transportation, communications, and the production of electricity, natural gas, and crude oil. Smith. Not offered in 1978-79.
Ec 470. Early Economic Thought. (G) 3 credit hours. Approaches to the study of the history of ideas. Early economic ideas and their relationship to the scientific and philosophical thought of the ancient and medieval world. Consideration of early conceptualizations of economic systems.
Ec 471 . Classical Economics. (G) 3 credit hours. Concepts of a market economy and economic growth in the works of Adam Smith, T. R. Malthus, David Ricardo, and Karl Marx.
Ec 472. The Evolution of Modern Economic Analysis. (G) 3 credit hours. The nineteenth century marginalist approach to microeconomic analysis; partial versus general equilibrium models of the economy ; institutionalist and theoretical critiques of the neoclassical tradition; from the ideas of W.S. Jevons to those of J. M. Keynes. Prerequisite : an elementary knowledge of economic concepts. and relationships.
Ec 475, 476, 477. Advanced Economic Theory. (G) 3 credit hours each term. Intensive examination of basic principles of price, distribution theory, income, and employment analysis.
Ec 480, 481, 482. Mathematical Economics. (G) 3 credit hours each term. Ec 480 : economic theory as formulated in mathematics; linear programming ; positive and negative definite quadritic forms; necessary and sufficient conditions for maxima and minima of functions of $n$ variables. Ec 481 : comparative static problems; individual demand curves; Slutsky equation analysis of consumer demand ; homogeneous functions; production function; substitution of factors; general equilibrium. Ec 482 : elementary growth models; turnpike theorems; stability analysis and equilibrium behavior under uncertainty with related mathematical topics of matrices, characteristic roots and differential equations. Must be taken in sequence. Prerequisite: Ec 201, 202, and elementary calculus. Not offered 1978-79.
Ec 483, 484, 485. National Income and Business Cycles. (G) 3 credit hours each term. Theory and practice of social accounting, index numbers, measure of business cycle stages, leading and lagging series, behavior of labor cost, productivity, and other economic measures of business fluctuations. Prerequisite : Ec 201 and 202. Not offered 1978-79.
Hst 487, 488, 489. American Economic History. (G) 3 credit hours each term. The economic development of the United States. First term : preindustrial America; second term : Civil War to World War I ; third term : World War I to present. Pope.
Ec 490, 491, 492. Development of Industrial Economics. (G) 3 credit hours each term. Comparative study of economic development in the advanced industrial nations. Fall term: industrialization in long term historical perspective ; its origins and geographic spread in the 18 th and 19 th centuries. Winter and
spring term : case studies selected from the historical experience of North America,
Western Europe, U.S.S.R., Japan, with emphasis on 20th century developments. Tattersall.
Ec 493, 494, 495. Econometrics. (G) 3 credit hours each term. Study of regression problems in which autocorrelations, heteroskedasticity, multicollinearity, and lagged dependent variables obtain ; special singleequation estimating techniques; the identification problem in a simultaneous equation setting ; development of simultaneous equation estimating procedures; the properties of these estimators; applications of these procedures to the problem of obtaining estimates of structural parameters in economic models containing many equations. Consent of instructor is required. Prerequisite : statistics. Bierwag.

## Graduate Courses

Ec 501. Research. Credit hours to be arranged. Ungraded.
Ec 503. Thesis. Credit hours to be arranged.

## Ungraded.

Ec 505. Reading and Conference. Credit hours to be arranged.
Ec 507. Seminar. Credit hours to be arranged. Capital Theory.
Econometrics. Bierwag.
Economic History. Tattersall.
General Equilibrium.
Growth and Dynamics.
Industrial Organization and Control. Smith.
History of Economic Thought. Campbell.
Labor Economics. Simeral.
International Trade and Development.
Mikesell.
Macrostatics.
Mathematical Economics.
Money and Credit. Siegel.
Optimization Techniques.
Public Finance.
Ec 508. Workshop. Credit hours to be arranged. Graded Pass/No-Pass only.
Ec 509. Practicum. 1-3 credit hours.

## Ec 514, 515, 516. Urban and Regional

 Economic Analysis. 3 credit hours each term. Analysis of the growth and structure of urban and regional economies ; theories of metropoliton, regional, and interregional relations; intra-and inter-urban rent, location and land use; patterns of naturalresource use ; and techniques of analysis. Analysis of the applied welfare economics and political economy of cities and regions: race and poverty; housing ; education; state and local public finance ; transportation; environmental quality ; and crime. Whitelaw.Ec 524, 525, 526. Economic Growth and Development. 3 credit hours each term. Economic, cultural, and political factors in economic development with special emphasis on low-income countries. Theory of economic development ; case studies in economic growth ; measures for accelerating development of poor countries; special problems of underdeveloped countries. Prerequisite : Ec 201 and 202, 12 credit hours in upper-division social science. Mikesell. Not offered 1978-79.

## English

## Faculty

George W'ickes, Ph.D., Department Head, Professor of English (twentieth century). B.A., Toronto, 1944 ; M.A., Columbia, 1949 ; Plı.D., California, 1954.

Robert C. Albrecht, Ph.D., Professor of English (American literature). B.A., Illinois, 1955 ; M.A., Michigan, 1957 ;
Pli.D., Minnesota, 1962.
Lucile F. Aly, Ph.D., Associate Professor of English (rhetoric ; teacher education). B.S., Missouri, 1936 ; M.A., Columbia, 1942 ; Ph.D., Missouri, 1959.

Roland C. Ball, Plı.D., Professor of English (comparative literature: romanticism, modern drama). B.A., Swarthmore, 1939 ; M.A., Cornell, 1941 ; Ph.D., California, 1953.
Roland Bartel, Ph.D., Professor of English (English education; romanticism). B.A., Bethel. 1947 ; Ph.D., Indiana, 1951.
James L. Boren, Ph.D., Associate Professor of English (Old and Middle English). B.A., San Francisco State, 1965 ; M.A., 1967, Ph.D., 1970 . Iowa. Edzin L. Coleman, Jr., Ph.D., Associate Professor of English (black literature). B.A., 1961, M.A., 1962, San Francisco State College; Ph.D., Oregon, 1971.
Kathleen E. Dubs, Ph.D., Assistant Professor of English (Old and Middle English; Old Icelandic), Director of Composition. A.B., 1969, A.M., 1971, Illinois; Ph.D., 1974, Iowa.
Marilyn Farwell, Ph.D., Assistant Professor of English (Renaissance ; criticism; women writers). A.B., MacMurray College, 1963 ; M.A., 1966, Ph.D., 1971, University of Illinois. (On sabbatical leave fall, winter 1978-79.) Stanley B. Greenfield, Ph.D., Professor of English (Old and Middle English). B.A., Cornell, 1942 ; M.A., 1947, Ph.D., 1950, California. (On leave, spring, 1979.)

Thelma Grcenfield, Ph.D., Professor of English (Renaissance drama). B.A., 1944, M.A., 1947, Oregon ; Ph.D., Wisconsin, 1952. (On sabbatical leave 1978-79.)
Clark Griffith, Ph.D., Professor of English (American literature). A.B., Central College (Mo.), 1947 ; M.A., Southern Methodist, 1948; Ph.D., Iowa, 1952.
Robert Grudin, Ph.D., Assistant Professor of English (Renaissance). B.A., Harvard, 1960 ; M.A., 1963, Ph.D.,

1969, California. (On sabbatical leave 1978-79.)
Jolm A. Haislip, Ph.D., Professor of English (poetry writing). B.A., 1950 , Ph.D., 1965, Washington. (On sabbatical leave, spring. 1979.)
William J. Handy, Ph.D., Professor of English (modern American ; criticism). B.A., 1947, M.A.. 1949, Ph.D., 1954, Oklahoma.
James E. Hoard, Ph.D., Associate Professor of English (linguistics). B.A., 1963, M.A., 1966, Plı.D., 1967, University of Washington.
Joseph A. Hynes, Jr., Ph.D., Professor of English (modern literature; fiction). A.B., Detroit, 1951 : A.M., 1952, Ph.D., 1961, Michigan.
Gloria, E. Johnson, Ph.D., Associate Professor of English (English drama). B.A., Barnard, 1944 ; M.A., 1946, Ph.D., 1954, Columbia.
Albert R. Kitshaber, Ph.D., Professor of English (rhetoric; teacher education). B.A., Coe, 1939 ; M.A., Washington State. 1941 ; Pl.D., Washington, 1953.

Glen A. Love, Ph.D., Professor of English (American literature ; rhetoric). B.A., 1954, M.A., 1959, Ph.D., 1964, Washington. (On sabbatical leave 1978-79.)
Richard M. Lyons, M.F.A., Associate Professor of English (fiction writing). Director of Creative Writing. B.A., Brooklyn, 1957 ; M.F.A., Iowa, 1962.
Stoddard Malarkey. Ph.D., Associate Professor of English (Middle English). A.B., Reed, 1955 ; M.Ed., Oregon State, 1960 ; Ph.D., Oregon, 1964.
Derry Malsch, Ph.D., Assistant Professor of English (linguistics). B.A., 1965, M.A., 1967, University of Chicago ; Ph.D., University of Wisconsin, 1971.

Stanley R. Maveety: Ph.D., Professor of English (Renaissance; Bible literature). B.S., Northwestern, 1943 ; M.A., Columbia, 1950 ; Ph.D., Stanford, 1956.

Barbara Clarke Mossberg, Ph.D., Assistant Professor of English (American literature; genre studies). B.A., California at Los Angeles, 1970 ; M.A., 1972, Ph.D., 1977, Indiana University.
William Rockett, Ph.D., Associate Professor of English (Renaissance). B.A., 1961, M.A., 1963, Oklahoma ; Ph.D., Wisconsin, 1969.
Ralph J. Salisbury, M.F.A., Professor of English (creative writing). B.A., 1949, M.F.A., 1951, Iowa.
Sharon Rochelle Sherman, Ph.D., Assistant Professor of English (folk-
lore). Plı.B., Wayne State University, 1965 ; M.A., California, Los Angeles, 1971 ; Plı.D., Indiana, 1978.
Irma Z. Sherztood, Ph.D., Associate Professor of English (eighteenth century). A.B., Barnard, 1940 ; M.A., 1942, Ph.D.. 1945, Yale.
John C. Sherzeood, Pli.D., Professor of English (eighteenth century). B.A., Lafayette, 1941 : M.A., 1942, Plı.D., 1945. Yale.

Clarence Sloat, Ph.D., Professor of English (linguistics). B.A., 1958 , M.A., 1960, Idaho State : Plı.D., Washington, 1966.
Richard L. Stein, Ph.D., Associate Professor of English (Victorian ; literature and the fine arts). B.A., Amherst College, 1965 ; A.M., 1966, Ph.D., 1970. California.
Richard C. Stevenson, Ph.D., Associate Professor of English (English novel; Victorian literature). A.B., 1961, A.M., 1963, Ph.D., 1969, Harvard.
William C. Strange, Ph.D., Professor of English (romanticism; lyric). B.A., Whitman, 1952 ; M.A., Montana. 1953 ; Ph.D., Washington, 1963.
Donald S. Taylor, Ph.D., Professor of English (eighteenth century). B.A., 1947, M.A., 1948, Ph.D., 1950, California, Berkeley.
Nathaniel Teich, Ph.D., Associate Professor of English (romanticism; literary criticism). B.S., Carnegie Institute of Technology, 1960 ; M.A., Columbia, 1962 ; Ph.D., California, Riverside, 1970.
J. Barre Toelken, Pli.D., Professor of English (folklore). B.S., Utah State, 1958; M.A., Washington State, 1959 ; Ph.D., Oregon, 1964.
A. Kingsley Weatherhead, Ph.D., Professor of English (modern poetry, fiction). M.A., Cambridge, 1949 ; M.A., Edinburgh, 1949 ; Ph.D., Washington, 1958.

Ma's'ud Zavarsadeh, Pl.D., Associate Professor of English (post-war American, poetics of fiction). B.A., Tehran University, 1963 ; Dip., Nottingham, 1964 ; Dip., Cambridge, 1964 ; M.A., Birmingham, 1966 ; Ph.D., Indiana, 1973. (On leave 1978-79.)

## Faculty Emeriti

Constance Bordreell, M.A., Associate Professor Emerita of English (writing; applied linguistics). B.A., Oregon, 1931 ; M.A., Washington State, 1932 ; Dip. in Linguistics, University College, London, 1970; at Oregon 1947-49 and since 1958.
Alice T. Ernst, M.A., Associate Professor Emerita of English. B.A., 1912,
M.A., 1913, Washington ; at Oregon since 1924.
Ruth F. Jackson, M.A., Senior Instructor Emerita in English. B.A., 1929,
M.A., 1933, Oregon ; at Oregon since 1955.

Edreard D. Kittoe, M.A., Assistant Professor Emeritus of English. B.A., 1931, M.A., 1936, Oregon ; at Oregon since 1936.
Waldo F. McNeir, Ph.D., Professor Emeritus of English (Renaissance). B.A., Rice, 1929; M.A., 1932, Ph.D.,

1940, North Carolina; at Oregon since 1961.

Ernest G. Moll, A.M., Professor Emeritus of English. A.B., Lawrence. 1922 ; A.M., Harvard, 1923 ; at Oregon since 1928.
Carlisle Moore, Ph.D., Professor Emeritus of English (Victorian and modern). B.A., 1933, M.A., 1934, Ph.D., 1940, Princeton; at Oregon since 1946.
Helen L. Soehren, M.A., Associate Professor Emerita of English (expository writing). B.A., 1935, M.A., 1938, Oregon ; at Oregon since 1942.
Christof A. Wegelin, Plı.D., Professor Eneritus of English (modern fiction, American literature). Dip. Tech.
Winterthur, 1933 ; M.A., North Carolina, 1942 ; Pl.D., Johns Hopkins, 1947; at Oregon since 1952.
Oliver M. Willard, Ph.D., Associate Professor Emeritus of English. B.A., Stanford, 1927 ; A.M., 1931, Ph.D., 1936, Harvard; at Oregon since 1946.

## Undergraduate Studies

The Department of English offers instruction in English literature, American literature, writing, English linguistics, folklore, and the literature of ethnic minorities. Its lower-division courses provide training in writing and introduce the student to literature as a humanistic discipline. Its upperdivision courses emphasize the humanistic values that emerge from studying literature and allied clisciplines in depth.

## Major Requirements

The Department of English expects its majors to acquire knowledge of English and American literature. In addition, it expects its majors to gain a general knowledge of history and a reading knowledge of at least one foreign language. Majors should construct their programs in consultation with an adviser. The general major recpuirements for the degree of Bachelor of Arts in the Department of English are as follows:
(1) Satisfaction of the University language requirements for the Bachelor of Arts clegree.
(2) Three terms of history.
(3) Three terms of literature chosen from Eng 104, 105, 106, 107, 108, 109, 204, 205, 206, 253, 254, 255.
(4) Three terms of Shakespeare-Eng 201, 202, 203.
(5) 36 graded hours in upperdivision courses. This requirement may be met in one of two ways: (a) 3 credit hours in the Middle Ages, 9 further hours in literature before 1800, 9 hours in literature since 1800 (these 21 hours need not be taken in period courses), plus 15 additional credit hours; or (b) a balanced and coherent program, constructed with an adviser's guidance, consisting of six rationally related courses in language, literature, or writing ( 18 credits), plus 18 additional credit hours. Students choosing option (b) must have the written approval of their advisers and of the Department Curriculum Committee no later than the second term of their junior year. Possible emphases for option (b) are suggested in the description of Department offerings above, and other emphases may be worked out to reflect personal and vocational goals. Prospective high school teachers should remember that they must satisfy state certification requirements.
(6) Any course used to satisfy requirements for the major in English must be passed with a grade of $C$ or better.

## Secondary School Teaching of English

The Department of English offers course work to prepare students to teach the language arts in Oregon public jumior and senior high schools. The department offers work toward the initial or basic teaching endorsement, and toward the standard endorsement. Certification as a teacher of language arts requires satisfactory completion of a program of teacher education which inclucles preparation in English and related subject fields, professional education, and the recommendation of the institution in which the preparation was completed. The University's program to prepare language arts teachers is subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission effective January 1, 1980. For specific information regarding department requirements for the language arts teaching endorsement, students should talk to the departmental norm adviser for teacher education, and the Office of Secondary Education in the College of Education.

## English Department Honors Program

This progran is designed to provide serious undergraduate majors with a number of important educational opportunities. During the sophomore and junior years, hothors students will participate in honors seminars dealing with literary topics to be announced at the beginning of each academic year. During the senior year, honors students will work on an extended writing project of their own choosing, prepared in conjunction with a course of study tailored to their own specific academic needs and conducted on a tutorial basis with a faculty member. The Honors program is fully compatible with courses and programs currently available in the department; the program's emphasis, particularly during the junior and senior years, is on the detailed study of limited topics--an extended consideration of one or two authors, a single literary problem, and so on.

Requirements for the clegree of Honors in English are as follows: (1) a minimum of three seminars during the sophomore and junior years, normally three terms of Eng 407
(Honors section) or the equivalent (under special circumstances, e.g., entry into the program after completion of the sophomore year, the requirement may be reduced to two seminars) ; (2) at the end of the junior year, submission of a topic for senior Honors projects to the program chairman. Honors seniors will enroll in Eng 403 during the first two terms of their senior year. The senior Honors project will consist of a thirty-forty page essay, creative work, or the equivalent, and will be due at the end of the second term of Eng 403. The project will be evaluated, along with the rest of the student's work, to determine if he or she is to receive the degree of Honors in English.

Admission to the Honors program: students will normally apply to the English clepartment for admission into the program during the spring term of their freshman year : admission will be determined by performance in literature and composition courses and by other evidence of superior acadenic ability.

Whenever possible, students should take honors sections of lower division courses. Also strongly recommended are Eng 300 and a year's study in the literature of a foreign language, preferably in the original.

## Graduate Studies

The Department of English offers graduate work in English literature, American literature, imaginative writ-
ing, and English linguistics; and programs leading to the Master of Arts degree in English1, the Master of Arts and Master of Fine Arts degrees in imaginative writing, the interdisciplinary Master of Arts degree in English and education, the Doctor of Arts and Doctor of Philosophy degrees in English, and the Doctor of Philosophy degree in English with concentration in English linguistics (see linguistics department). A Ph.D. program in comparative literature, administered by a committee representing the Departments of English, Classics, Chinese and Japanese, German and Russian, and Romance Languages, offers opportunity for advanced study of several literatures in their otiginal languages. A detailed description of the programs will be sent with the Application for Admission Form.

## Master of Arts Degrees

The usual requirements for admission to the M.A. in English and the M.A. in imaginative writing are as follows:
(1) An undergraduate GPA of 3.0 or, if the student has twelve or more hours of graduate work in English, a 3.0 graduate GPA.
(2) A combined Graduate Record Examination scorc of 1100 on the Verbal Section of the General Aptitude Test and the Advanced Test in Literature in English. (The Quantitative part of the GAT is optional.)
(3) For nonnative speakers: a score of 600 on the TOEFL examination.
(4) Other materials submitted under Admission Procedures that give evidence that the candidate will be able to complete the prescribed course of study satisfactorily.

Admission Procedures:
(1) Obtain an Application for Graduate Admission from the Graduate Englis! Department (GED).
(2) Send the first copy to the University Admissions Office with a $\$ 10.00$ fee, and the remaining copies to the GED.
(3) Arrange to have two copies of graduate and undergraduate transcripts sent, one to the University Admissions Office, the other to the GED.
(4) Have an official transcript of scores on the GRE tests sent to the GED.
(5) Ask three persons familiar with your academic background and intellectual abilities to send letters of recommendation to the GED.
(6) Submit to the GED a 200 -word statement of background and objectives in pursuing the course of study.
(7) Submit to the GED a copy of a course paper that demonstrates your ability in literary studies.

The completed file will be reviewed by the Departmental Admissions Committee, which will notify the candidate of its decision. All admissions are conditional, and some may be limited to Summer Session only; after the candidate has completed from four to six courses at the University, his or her academic record will be reviewed for clearance toward the degree.

## Degree Requirements:

The department offers both a 55 credit hours degree program, for candidates who do not plan to go beyond the M.A., and a 45 -credit hour program, for those who contemplate proceeding to a doctoral degree.
The 45 -credit-hour program requires a reading knowledge of a foreign language (GSFLT score of 25 th percentile or its equivalent) and a passing grade (B) in one of the following: Eng 490, 511,517 , or 520 ; equivalency may be granted (by petition) for undergraduate (or graduate) work taken elsewhere. It also involves passing three fields of study from among the following: (1) Old English literature,
(2) Middle Englishl literature,
(3) Renaissance dramatic literature, (4) Renaissance nondramatic literature, (5) English literature 1660-1780,
(6) Englishi literature 1780-1830,
(7) English literature 1830-1900,
(8) American literature to 1890 ,
(9) American literature since 1890 , (10) special studies, (11) English linguistics, (12) British and American literature 1900-1945, (13) British and American literature since 1945,
(14) Rhetoric and Composition. Candidates who elect field (9) may not elect field (12) and/or (13) ; and those who elect (12) and/or (13) may not elect (9). Field 10 provides for a nonperiod approach in areas slich as folklore, the Bible as literature, film as literature, psychology and literature, black literature, literature in another language; only one Field 10 may be used to satisfy this field requirement for the M.A. At least one of the three fields chosen must be satisfied by examination; the other two may be satisfied by examination or course work.
The 55 -credit-hour program differs from the 45 -credit-hour program in not having special field requirements or an examination. It does require, however, a reading knowledge of a foreign language (GSFLT score of 25 th percentile or its equivalent) and a passing grade (B) in one of the following : Eng 490, 511, 517, or 520 ; equivalency may be granted
(by petition) for undergraduate (or graduate) work taken elsewhere.

The M.A. in imaginative writing may be earned in either program. It differs from the other M.A. degrees chiefly in substituting up to 10 credit hours of creative writing for courses in literature, and in requiring a thesis (a work of imaginative writing) in place of 5 credit hours of formal course work.

## Master of Finc Arts Degree

Requirements for Admission:
(1) An undergraduate degree.
(2) Other materials submitted under Admission Procedures that give evidence that the candidate will be able to complete the prescribed course of study satisfactorily.
Admission Procedures :
(1) Obtain an Application for Graduate Admission from the Director of Creative Writing Programs, Department of English.
(2) Send the first copy to the University Admissions Office with a $\$ 10.00$ fee, and the remaining copies to the director.
(3) Arrange to have two copies of graduate and undergraduate transcripts sent, one to the University Admissions Office, the other to the director.
(4) Ask two persons familiar with your potential as a writer to send letters of recommendation to the director.
(5) Submit a sample of your creative writing to the director.

Application may be made for any term except Summer Session.
Degree Requirements:
The candidate for the M.F.A. degree must complete 72 credit hours of graduate work including' at least 18 credit hours in English and American literature and literature in translation, at least 18 credit hours in writing, and 18 credit hours in thesis, the result of which must be a work of literary merit. The remaining credit hours may be taken in related fine-arts fields such as the history and criticism of art, music, and drama ; in additional literary studies, aesthetics, or other fields relevant to the candiclate's needs as a writer. The candidate must also pass a written examination on a reading list of works of fiction, poetry, or drama.

## Doctor of Arts and Doctor of Philosophy Degrees

The usual requirements for admission are as follows:
(1) An M.A. in English, with a 3.33 graduate GPA.
(2) A combined Graduate Record Examination score of 1250 on the

Verbal Section of the General Aptitude Test and the Advanced Test in Literature in English. (The Quantitative part of the GAT is optional.)
(3) (For nonnative speakers:) a score of 600 on the TOEFL examination.
(4) Other materials submitted under

Admission Procedures that give evidence that the candidate will be able to complete the prescribed course of study successfully.
Admission Procedures: same as for Master of Arts degrees. Applicants who received their M.A. degrees at Oregon should see the graduate secretary.

## Degree Requirements:

The doctoral program requires a minimum of three years of full-time study beyond the baccalaureate degree, at least the first year of which must be spent in residence on the Eugene campus where the candidate must take a minimum of six formal courses or seminars in English. Both the D.A. and the Ph.D. degrees include the following requirements:
(1) Either high-competence knowledge of one foreign language, usually French or German (GSFLT score 70th percentile or third-year sequence) ; or secondyear competence in two languages
(GSFLT 25 th percentile).
(2) A bibliography course, Eng 540 (a candidate who has had equivalent graduate work elsewhere may consult the director of English Graduate Studies about using that work to satisfy part or all of this requirement). A doctoral candidate in English is required to take Eng 540 no later than the first term it is available after he or she has received the M.A.
(3) Passing six fields of study from among those listed under the degree requirements for the Master of Arts degrees; two of these fields may be Field 10. At least three of the fields must be satisfied by examination, the rest by examination or course work. Fields passed for the M.A. at the University of Oregon count toward the six. Students entering with an M.A. or transfer graduate credits may petition to satisfy up to three fields on the basis of their former graduate course work, but they must satisfy a minimum of three fields by examination at the University of Oregon.

Students in the English linguistics option may satisfy the field requirements as follows: (a) English Linguistics, Eng 520, 521, 522, (b) General Linguistics, Ling 514, 515, 516, (c) Language study, Eng 511, 517 and one additional course selected from Eng 512,
$513,518,519,514,515,516$, (d)
English or linguistics, as approved by Linguistics staff and Graduate Committee, by exam, (e) Linguistic analysis (syntax/semantics or phonology) by exam, (f) Historical linguistics (historical/comparative or dialectal/social), by exam.
(4) Passing (grade B) one of the following: Eng 490, 511, 517, or 520 ; equivalency may be granted (by petition) for undergraduate (or graduate) work taken elsewhere.
(5) Supervised experience as classroom teachers in the department.

When the above requirements are satisfactorily completed, the candidate, upon passing a special examination, may obtain the Doctor of Arts degree.
The Ph.D, will be granted upon completion of the above requirements (except the Doctor of Arts examination) and of a dissertation and examination (or presentation) thereon. The dissertation may be a work of literary or linguistic scholarship on a single subject or, if the proposed director of the dissertation is agreeable, a collection of three substantial essays exhibiting internal coherence but not necessarily treating a single precisely defined subject. The department does not offer a Ph.D. in creative writing.

* Students in the English linguistics option should consult the linguistics department for special field requirements.


## Literature

## Undergraduate Courses

Since we cannot guarantee that every course listed here will be offered every year, students are advised to consult the most recent Time Schedule of Classes.
Eng 104, 105, 106. Introduction to Literature. 3 credit hours each term. Study of literature and the nature of literary experience through the reading of great works of prose and poetry, drawn from English and other literatures. Works representing the principal literary types are read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery, and symbolism. Eng 104: fiction; Eng 105: drama; Eng 106: poetry.
Eng 107, 108, 109. World Literature. 3 credit hours each term. Study of the literary and cultural foundations of the Western world through the analysis of a selection of masterpieces of literature, ancient and modern, read in chronological order. The readings include continental, English, and American works.
Eng 151. Introduction to Black Literature. 3 credit hours. Reading and critical analysis of Afro-American fiction, poetry, and drama in historical and thematic perspective; examination of various movements in the black experience which influenced the literature. Coleman.
Eng 199. Special Studies. 1-3 credit hours. Eng 200. SEARCH. 1-3 credit hours.

Eng 201, 202, 203. Shakespeare. 3 credit hours each term. Study of the important plays-comedies, histories, and tragedies. Required for majors. Boren, Farwell, T. Greenfield, Grudin, Johnson, Maveety, Rockett, I. Sherwood, Strange.
Eng 204, 205, 206. Survey of English Literature. 3 credit hours each term. Study of the principal works of English literature based on reading selected to represent great writers, literary forms, and significant currents of thought. Provides a background that will be useful in the study of other literatures and other fields of cultural history. Fall: Anglo-Saxon beginnings to the Renaissance ; winter : Milton to Wordsworth; spring: Byron to present. Bartel, Dubs, Kitzhaber.

## Eng 240. Introduction to Native American

 Literature. 3 credit hours. A study of the literature of Native Americans. The nature and function of oral literature necessarily forms an important part of the course. The traditional literature provides a background for a study of contemporary Native American writing. Toelken.
## Eng 250. Introduction to Folklore and

Myth. 3 credit hours. Study and discussion of the processes and genres of traditional (i.e.) folk patterning; the relations between these forms of expression and other arts, especially English and American literature. Sherman, Toelken.
Eng 253, 254, 255. Survey of American Literature. 3 credit hours each term American literature from its beginnings to the present day. Albrecht, Ball, Love, Mossberg, Newberry, Wickes, Zavarzadeh, staff.
Eng 260. Introduction to Women Writers.
3 credit hours. A study of women writers and their work in western society : the status of women writers with critics and public, their view of the role of women in society and their unique literary styles and perspectives. Farwell.
Eng 300. Critical Approaches to Literary Study. 3 credit hours. A study of the purposes and techniques of literary analysis and argument, including extrinsic and intrinsic approaches to criticism (historical, generic, formalistic, mythic, etc.) and the use of library resources. The term's work involves several written exercises reflecting different modes of investigation. Recommended for majors in their sophomore or early junior year. Farwell, Teich.
Eng 301. Tragedy. 3 credit hours. A study of the nature of tragedy and of tragic expression in various literary forms. Mossberg.
Eng 302. Romance. 3 credit hours. An introduction to critical theory of the genre; readings of narratives of adventure and quest, including works in the allegorical mode. Classical, medieval, and modern examples, with attention to romance elements in twentieth-century works. Ball.
Eng 303. Epic. 3 credit hours. A study of epic and heroic literary masterpieces and of the nature of the epic genre. Dubs, Strange.
Eng 304. Comedy. 3 credit hours. The comic view in both dramatic and nondramatic forms. Main emphasis on English masters, but with attention also to classical and continental writers. Principal theories of the comic and of comic literary forms and types. Mossberg, I. Sherwood, Stein.
Eng 305. Satire. 3 credit hours. Satire, or criticism through ridicule, as a major type. of literary expression. Examples from various literary forms-dramatic, narrative, poetic, and graphic--and from ancient and foreign literatures as well as English. Special emphasis on contemporary satire. Mossberg.

## Eng 310. Black Prose. 3 credit hours.

Forms, themes, and styles in the fictional and nonfictional prose of A frica, the West Indies, and Afro-America. Reading will include novels, short stories, essays, autobiographies, and other narratives. Coleman.
Eng 311. Black Poetry. 3 credit hours. The study of African, West Indian, and AfroAmerican poetry, written and performed. Coleman.
Eng 312. Black Drama. 3 credit hours. Major achievements in African, West Indian, and Afro-American drama. Coleman.
Eng 321, 322, 323. English Novel. 3 credit
hours each term. Fall: rise of the novel from Defoe to Austen ; winter : Scott to Hardy ; spring : Conrad to the present. Stevenson.
Eng 324. American Satire. 3 credit hours. Satire in American literature ; its nature, development, and significant contributions to the interpretation of American life. Love.
Eng 325. Literature of the Northwest. 3 credit hours. A survey of the significant literature of the Pacific Northwest as set against the principles of literary regionalism. Love.
Eng 391, 392, 393. American Novel. 3 credit hours each term. Development of the American novel from its beginnings to the present. Griffith, Love, Newberry.
Eng 394, 395, 396. Twentieth-Century Literature. 3 credit hours each term. A critical suryey of British, American, and some European literature from 1890 to the present; significant works of poetry, drama, and fiction studied in relation to intellectual and historical developments. Hynes, Weatherhead,
Zavarzadeh.
Eng 400 . SEARCH. $1-3$ credit hours.
Eng 401. Research. Credit hours to be arranged.
Eng 403. Thesis. Credit hours to be arranged. Eng 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

Eng 407. Seminar. (G) Credit hours to be arranged.
The following listing is representative ; only a selection of seminars is offered each year.
Chaucer's Troilus and Minor Poems. Boren, S. Greenfield.

The Bible in the Renaissance. Maveety.
Topics in Seventeenth Century Poetry. Rockett.
The American Short Story, or American Poetry. Griffith.
Western American Literature. Love.
Major Black Writers. Coleman.
Topics in Folklore and Mythology : Myth and Literature, Ethnic Folklore, American Indian Oral Literature, etc. Sherman, Toelken.
Criticism. J. Sherwood.
Experimental Fiction. Hynes.
Theory of Literary History. Taylor.
Topics in Modernism and Postmodernism. Zavarzadeh.
Guthrie and Dylan. W. Strange.
Studies in the Novel: The Novel of Youth and Initiation, The Historical Novel, etc. Stein, Stevenson.
Art and Literature. Stein.
Biography and Autobiography. Wickes.
American Popular Literature. Sherman.
Prose Styles. Weatherhead.
Eng 407. Seminar. (g) Credit hours to be arranged.

Eng 408. Workshop. (g) Credit hours to be arranged.
Eng 409. Supervised Tutoring Practicum. (G) 1-3 credit hours any term. A no-grade course.
Eng 410. Experimental Course. (G) Credit hours to be arranged. Seminar topics listed under 407 (G) may also be offered under this number as courses.
Eng 411, 412, 413. English Drama. (G) 3 credit hours each term. Development of English drama from medieval to modern times, with emphasis on the growth of genres and connections with cultural history. Fall: Middle Ages to Marlowe ; winter: Jacobean period; spring: Restoration, eighteenth, and nineteenth centuries, from Dryden to Shaw. Johnson.
Eng 414, 415, 416. History of Literary Criticism. (G) 3 credit hours each term. Studies in the theory and practice of literary criticism from Plato and Aristotle to the present. Farwell, Handy, J. Sherwood.
Eng 417. Studies in Mythology. (G) 3 credit hours. A survey of the mythology of one or more cultures with special attention to comparative relationships, world views, theoretical schools of interpretation, and the use of myth in literature. Sherman. Toelken.
Eng 418. Folklore and Mythology of the British Isles. (G) 3 credit hours. A study of some basic folk traditions in the British Isles (e.g., ballads, folktales, legends, myths, jokes, games, festivals, folk drama) and their treatment in the written literature of major
British authors (e.g., Chaucer, Shakespeare, Romantic poets, Dickens, Hardy, Yeats). Sherman, Toelken.
Eng 419. American Folklore. (G) 3 credit hours. A study of American folklore; its connections in American history and culture; its role in the development of the writings of selected American authors (e.g., Hawthorne, Melville). Sherman, Toelken.
Eng 420, 421, 422. Modern Drama. (G) 3 credit hours each term. Fall: growth of the modern theater in Europe through 1919, naturalism, symbolism, expressionism; winter : European and American drama between 1920-1949, the experimental theater and its effects on realism ; spring: international developments in drama from 1950 to the present. Ball.
Eng 425. Early English Literature. (g) 3 credit hours. The literature of the Middle Ages, in relation to the social and literary ideas of the period. Boren, S. Greenfield.
Eng 428. Chaucer. (g) 3 credit hours. Selections from The Canterbury Tales and minor poems. Boren, Dubs, S. Greenfield. Malarkey, Toelken.

## Eng 430, 431, 432. Literature of the

Renaissance. (G) 3 credit hours each term.
Fall: Renaissance thought ; winter: Renais-
sance epic and prose narrative; spring:
English lyric from Wyatt to Herrick.
T. Greenfield, Grudin, Maveety.

Eng 434. Spenser. (G) 3 credit hours.
T. Greenfield.

Eng 436. Advanced Shakespeare. (G) 3
credit hours. Detailed study of selected plays.
When offered in spring term or summer session, the course may concentrate on the plays to be presented in Ashland that summer. Johnson.
Eng 437, 438. The Literature of the English Bible. (G) 3 credit hours each term. Study of the literary qualities of the English Bible, with some reference to its influence on English and American literature. Maveety.

Eng 440, 441, 442. Seventeenth-Century Literature. (G) 3 credit hours each term. Poetry and prose from Jonson through the Restoration studied in relation to the trends of thought and feeling which characterize the century. Maveety, Rockett.
Eng 444. Milton's Minor Poems and Prose.
(G) 3 credit hours. The Pocms of 1645 and the major prose works on liberty, education, and politics. Far well.
Eng 445. Milton's Major Poems. (G) 3
credit hours. Paradise Lost, Paradise
Regained, and Samson Agonisfes. Farwell, Maveety.
Eng 450, 451, 452. Eighteenth-Century Literature. (G) 3 credit hours each term. Fall: Restoration ; winter: primarily Swift and Pope ; spring : primarily Johnson and circle. Works are studied in relation to specific literary traditions. I. Sherwood, J. Sherwood, Taylor.
Eng 460, 461, 462. English Romantic Writers. (G) 3 credit hours each term. Studies in the variety of romantic thought and expression. Fall : Blake, Burns, and other writers of the age of gothic and sensibility ; winter : Wordsworth, Coleridge, Hazlitt, and other writers of the age of revolution; spring: Byron, Shelley, Keats, and other writers of the second generation. Ball, Strange, Teich.
Eng 463, 464, 465. The Victorian Poets.
(G) 3 credit hours each term. Victorian poetry as a response to urbanization and the rise of industrial capitalism ; emphasis on the major figures, in the light of modern critical theory. Tennyson, Browning. Meredith, Thomson, Fitzgerald, Clough, Patmore, Hopkins, Wilde, Kipling. Stein.
Eng 470, 471, 472. Nineteenth-Century Prose. (G) 3 credit hours each term. Main currents of thought as reflected in Carlyle, Mill, Newman, Ruskin, Huxley, Arnold, Pater. Stein.
Eng 473, 474. Nineteenth-Century English Fiction. (G) 3 credit hours each term. An introduction to the detailed study of nine-teenth-century English fiction. Emphasis is on analysis of texts in critical and social perspective. Stevenson.
Eng 477, 478, 479. American Literature Before 1900. (G) 3 credit hours each term. Early American literature ; romanticism; realism and naturalism. Not a sequence course. Albrecht, Griffith.
Eng 480. Major British Writers. (G) 3 credit hours. Detailed study of two or three British authors not substantially treated in other courses. May be repeated for credit. Hynes, Taylor, Weatherhead, Wickes.
Eng 481, 482, 483. Major American
Writers. (G) 3 credit hours each term.
Detailed study of two or three major authors each term, such as Hawthorne, Emerson, Whitman, Melville, James, Twain, Dickinson, Frost, Eliot, Hemingway, Faulkner. Albrecht, Handy, Love, Wickes, Zavarzadeh.
Eng 487. Yeats and Joyce. (G) 3 credit hours. The principal works of Yeats and Joyce, considered against the background of the Irish Renaissance. J. Sherwood.
Eng 488. Literary Analysis for Teachers. (g) 3 credit hours. For students interested in teaching high-school English. Training in comprehension and analysis of fiction, poetry, and drama from English and American literature. Bartel.
Eng 489. Teaching Writing. (g) 3 credit hours. An explanation of the theory and practice of Teaching Writing in the secondary schools with emphasis on developing theoretically sound methods of teaching expository writing. Strategies for teaching creative
writing are also explored. Staff.
Eng 490. English Grammar. (G) 3 credit hours. A comprehensive survey of grammatical, syntactic, and morphological structures of English in terms of semantic and functional criteria. Malsch.
Eng 491. History of the English Language. (g) 3 credit hours. The study of the linguistic origins and development of English for prospective teachers of English. Prerequisite: Ling 290. Malsch, Sloat.
Eng 492. Applied English Linguistics. (g)
3 credit hours. Study of modern English linguistics for prospective teachers of English. Prerequisite : Ling 290. Hoard, Malsch, Sloat. Eng 493. Structure of English. (g) 3 credit hours. A detailed examination of modern English grammars. Prerequisite : Ling 290. Hoard, Malsch, Sloat.

## Eng 494. Existentialism and Modern

Literature. (G) 3 credit hours. A critical study of nineteenth- and twentieth-century works which reflect the characteristic subject matter and themes of existentialism, works by such authors as Kierkegaard, Nietzsche. Tolstoy, Pirandello, Camus, Sartre, Kafka, Beckett, Albee, Kesey. Ball, Handy.
Eng 496, 497. Contemporary American Literature. (G) 3 credit hours each term. A crtical study of post-World War II American writing in the context of contemporary aesthetic and cultural developments. Exploration of the new generic, thematic, and stylistic directions in recent fiction, poetry, and drama, with attention to the literary (dis) continuities in postmodern American literature and the shaping of such innovative modes as metafiction, the nonfiction novel, speculative fiction, concretc poetry, dramatic happenings, and paracriticism. Zavarzadeh.
Eng 498. Studies in Women and Literature. (G) 3 credit hours. An examination of specific topics related either to women writers or to women and literature or to both. Topics may include women writers of a specific era, feminist criticism, genres such as autobiography, diary, novel, and poetry, and in-depth studies of the work of one ( or at most a few) women writers. May be repeated for maximum of nine credit hours. Farwell, I. Sherwood.

## Writing

## Creative Writing

The department offers creative writing courses for nonmajors and majors. Undergraduate English majors planning a program emphasizing creative writing are advised to complete at least 6 credit hours of Introduction to Imaginative Writing, Wr 241, 242, 243. For information on the graduate program leading to the M.A. or M.F.A. degree, consult the Director of the Creative Writing Program.

## Expository Writing

The clepartment offers required and elective courses in expository writing for all University students to help them improve their abilities to write clearly and effectively. All students must fulfill the University writing requirement of 6 hours of composition or be cleared according to established waiver and
exemption policies. The requirement is : Wr 121 and either Wr 122 or Wr 123, or their approved equivalents, excluding courses numbered 199 and 400-410.

Exemptions from the first term of writing will be given to students who score 650 and above on the CEEB SAT Verbal or Achievement Test in English Composition (EN). Students shotuld present official copies of their scores to the Composition Office, English Department, if not granted exemption at time of admission. No credit is awarded for this exemption. Students with CEEB Advanced Placement Test scores in English composition of 3, 4, or 5 will clear the requirement and receive 6 hours of transfer credit in writing.

Waiver exams for Wr 121 and Wr 122 are offered regularly at the Testing Office, Counseling Center, and should be considered by students who are highly competent writers. Additionally there are substitutions possible for the second required course ; students who were exempt from or earned an A in Wr 121 may select any 200 - or 300 level expository writing course to fulfill the requirement.

For writing placement, a test score on the TSWE is necessary for all new students and transfer students who have not satisfied the writing requirement. Students should sign up for the TSWE before registration at the Counseling Center Testing Office, or during registration at the English table. Transfer students in doubt about the equivalency of courses taken elsewhere should bring transcripts and catalog descriptions to the Composition Office, English Department, for evaluation.

## Undergraduate Courses

Wr 91, 92, 93. English as a Second Language. 3 credit hours each term. Study of written and spoken English for students whose native language is not English. Includes practice in pronunciation, vocabulary building, reading, and writing. Staff.
Wr 120. Preparatory English Composition. 3 credit hours. A basic skills course. Includes practice in sentence structure, punctuation, usage, and organization. Required for those with low writing placement scores as a prerequisite to Wr 121 ; does not satisfy the two-term writing requirement. Staff.
Wr 121. English Composition. 3 credit hours. Fundamentals of expository prose ; frequent written themes. Practice in various rhetorical modes with special attention to the relation between substance and structure in written discourse. Staff.
Wr 122. English Composition. 3 credit hours. Advanced expository prose ; frequent written themes. Special attention to style, audience, and argument. Prerequisite: Wr 121 or equivalent. Staff.
Wr 123. English Composition. 3 credit
hours. Research Paper; the techniques for compiling and writing academic and technical
papers. Practice in writing a long paper based on the use of library resources and taking notes. Prerequisite: Wr 121 or equivalent. Staff.
Wr 199. Special Studies. 1-3 credit hours. Wr 227. Scientific and Technical Writing. 3 credit hours. Practice in scientific and technical expository writing. Emphasis on the organization, form, and style of scientific, technical, and professional reports, articles, abstracts, summaries, memoranda, and correspondence. Prerequisite: Wr 121 or equivalent, and consent of instructor. Kitzhaber.
Wr 241, 242, 243. Introduction to Imaginative Writing. 3 credit hours each term. Introductory courses for students interested in the techniques of writing fiction, drama, and poetry, and in the development of a critical appreciation of the art of writing. Wr 241 : fiction; Wr 242 : drama; Wr 243 : poetry. Staff.
Wr 316. Advanced Expository Writing. 3 credit hours. Practice in various forms of expository writing. Frequent written themes. Prerequisite: Completion of writing requirement or equivalent, and junior standing. Aly, Kitzhaber.
Wr 321. Business and Technical Communications. 3 credit hours. Practice writing and analyzing internal and external messages common to business, industry, and professions. Suggested for students of business and management. Prerequisite : Wr 121 or equivalent.
Wr 324, 325, 326. Short-Story Writing. 3 credit hours each term. An upper-level course for students interested in short-story writing. Examination of the basic techniques and structure of the short story ; extensive analyses of student work and established models. Consent of instructor is required. Lyons, Salisbury.
Wr 331, 332, 333. Play Writing. 3 credit hours each term. Creative experiment in the writing of plays, with incidental study of models. Analysis and discussion of student work. Consent of instructor is required.
Wr 341, 342, 343. Poetry Writing. 3 credit hours each term. Verse writing ; study of various verse forms as media of expression. Analysis of class work. Consent of instructor is required.Haislip, Salisbury.
Wr 404. Writing and Conference. Credit hours to be arranged.
Wr 430, 431, 432. Senior Creative Writing. 3 credit hours each term. An advanced sequence in short story, poetry, and playwriting. Consent of instructor is required.
Haislip, Lyons, Salisbury.
Wr 451, 452, 453. Projects in Writing. 3 credit hours each term. For students who desire advanced instruction and practice in writing short stories, novels, television dramas, nonfiction, etc. Consent of instructor is required. Haislip, Lyons, Salisbury.

## Upper-Division Courses Carrying Graduate Credit

Wr 409. Supervised Tutoring Practicum.
(G) 1-3 credit hours. A no-grade course.

Wr 411. English Composition for Teachers. (g) 3 credit hours. For students planning to teach English in high school. Practice in writing, and a review of the rules of composition. Recommended for satisfaction of the high-school teaching requirement in English. Aly, Kitzhaber.
Wr 420, 421, 422. Novel Writing. (G) 3 credit hours each term. Designed to provide apprentice training in writing of novels, and
to develop a critical grasp of fiction problems. Sustained work on a writing project continued through the year. Individual assigned readings. Consent of instructor is required. Lyons. Not offered 1978-79.

## Graduate Courses

## Literature

Consent of instructor is required for all 500 -level courses.
Eng 501. Research. Credit hours to be arranged. A no-grade course.
Eng 502. Supervised College Teaching. Credit hours to be arranged. A requirement for English graduate students who do not have teaching experience and who intend to apply for teaching fellowships. Consent of instructor required. A no-grade course
Eng 503. Thesis. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Eng 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Eng 507. Seminar. Credit hours to be arranged. Consent of instructor is required. There are fourteen fields of interest in the graduate program. Master's degree candidates in the 45 -credit-hour program are required to show competence in three such fields; Doctoral candidates must show competence in six fields. A choice among seminars, along with 407 seminars and courses at the 400 and 500 level, may be used to help fulfill these requirements. Students should plan their programs judiciously, for only a selection of seminars, of which the following are representative, is offered in any given academic year:
Old English Literature and Criticism. S. Greenfield.

Arthurian Tradition in Medieval Literature. Boren, Malarkey.
Shakespeare Studies. Grudin, Maveety.
Special Authors in Renaissance Drama. T. Greenfield, Grudin, Johnson.

Special Authors in Renaissance Nondramatic Literature. Farwell, T. Greenfield, Grudin, Maveety.
Metaphysical Poets. Rockett.
Restoration Drama. I. Sherwood.
Boswell and Johnson. I. Sherwood
18th Century British Fiction, or Poetry. Taylor.
Topics in Romantic Poetry: Blake's
Prophecies, Romantic Lyric, etc. Strange.
Romantic Criticism. Teich.
The Heroine in British Fiction. Stevenson.
Topics in Victorian Literature. Stein, Stevenson.
Topics in American Literature: Transcenden-
talism, Romanticism, Realism and Naturalism. Griffith, Love, Newberry.
Colonial American Literature. Griffith, Newberry.
Studies in Major American Writers,
Griffith, Handy, Love, Newberry.
Contemporary British and American Drama. Ball.
Modern Criticism. Handy
African and West Indian Literature. Coleman.
Topics in Folklore and Mythology : Ballad and Folksong, Folklore Fieldwork, etc. Sherman, Toelken.
Modern Novel. Wickes.
Henry James. Hynes.
Joyce. J. Sher wood.
Recent American Poetry. Weatherhead.
Innovative American Fiction. Zavarzadeh.
Literary Theory. Farwell, Zavarzadeh.
Linguistics. Please see page 98 .

Eng 508. Workshop. Credit hours to be arranged.
Eng 510. Experimental Course. Credit hourse to be arranged.
Eng 511, 512, 513. Old English. 5 credit hours each term. Linguistic and literary study; selected readings in prose and poetry, including entire Beorenlf. Consent of instructor is required. Dubs, S. Greenfield.
Eng 514, 515, 516. Old Icelandic. 5 credit hours each term. Linguistic and literary study : East and West Norse; reading from historical sources, the sagas, the Prose Edda, and skaldic poetry. Of particular interest to students of Old English and Germanic antiquity. Consent of instructor is required. Offered in 1978-79 and alternate years. Dubs.

## Eng 517. Middle English Dialects. 5 credit

 hours. An introduction to English grammar, dialects, and literature from the Norman conquest to the early modern period. Consent of instructor is required. Boren, Dubs.Eng 518. Middle English Survey. 5 credit hours. A study of the literature of the Middle English period exclusive of Chaucer and the work of the Pearl-poet. Prerequisite : Eng 517. Consent of instructor is required. Boren.

Eng 519. The Pearl Poet. 5 credit hours.
Detailed study of the works attributed to the Pearl-poet, with concentration on Pearl, and Sir Gazvain, and the Green Knight. Prerequisite: Eng 517, and consent of the instructor. Boren, Malarkey.
Eng 520, 521, 522. History and Structure of the English Language. 5 credit hours each term. The study of English syntactic, semantic, and phonological systems, both modern and historical, from the perspective of current linguistic theory. Prerequisite : Ling 421 or Eng 490. Consent of instructor is required. Malsch.
Eng 524. Chaucer's Troilus and Criseyde. 5 credit hours. Detailed study of Troilus and Criseyde and the minor poems. Prerequisite: Eng 517, and consent of the instructor. Boren, S. Greenfield, Malarkey.
Eng 530, 531, 532. Shakespeare. 5 credit hours each term. Fall: representative comedies of Shakespeare's early, middle, and late periods; winter : historical plays; spring : tragedies. Consent of instructor is required. Grudin, T. Greenfield, Johnson.
Eng 535, 536, 537. Tudor and Stuart Drama.
5 credit hours each term. Fall: beginnings through Marlow; winter : Dekker through
Jonson; spring: Webster through Ford.
Shakespeare not included. Consent of instructor is required. T. Greenfield.
Eng 540. Introduction to Literary Research. 3 credit hours. A study of bibliographical tools and methods of research. Practical training in research projects. Recommended for M.A. candidates with research interests. Required of Ph.D. candidates; to be completed not later than the first year of doctoral study. Ordinarily given winter term. Consent of instructor is required. Newberry, Rockett.
Eng 588. Modern British Poetry. 5 credit hours. British poetry from Hardy to the present. Consent of instructor is required. Weatherhead.
Eng 589. Modern American Poetry. 5 credit hours. American poetry from the imagists to the present. Consent of instructor is required. Weatherhead.
Eng 590, 591, 592. Modern Fiction. 5 credit
hours each term. Major tendencies of the fiction of the past hundred years. Fall : the rise and development of realism; winter : naturalism; spring : postnaturalism. Consent
of instructor is required. Griffith, Wickes, Zavarzadeh.

## Eng 593, 594. Contemporary British

Fiction. 5 credit hours each term. A study of British fiction since the late 1930s. The two terms are a chronological treatment of developments in British fiction-writing of the past forty years, with emphasis on analyses of particular works by important writers. First term : such authors as Elizabeth Bowen, Henry Green, Evelyn Waugh, Graham, Greene, Joyce Cary, Samuel Beckett. Second term: such authors as Anthony Powell, Doris Lessing, Iris Murdoch, Muriel Spark, Anthony Burgess, William Golding, Kingsley Amis, Alan Sillitoe, John Fowles. Consent of instructor is required. Hynes.

## Writing

Wr 503. Thesis. Credit hours to be arranged. A no-grade course. Consent of instructor is required.
Wr 504. Writing and Conference. Credit hours to be arranged. Consent of instructor is required.
Wr 530, 531, 532. Graduate Creative Writing. 3 credit hours each term. A graduate level sequence required of M.F.A. candidates, but open to other graduate students with interest and talent. Concentration on student writing in a workshop approach. Consent of instructor is required. Haislip, Lyons, Salisbury.

## Geography

Faculty
Carl L. Johannessen, Ph.D., Department Head, Professor (biogeography, Central America). B.A., 1950, M.A., 1953, Ph.D., 1959, California.
William G. Loy, Ph.D., Associate Professor (cartography, interpretation of aerial imagery, geomorphology). B.A., Minnesota, 1958; M.S., Chicago, 1962; Ph.D., Minnesota, 1967.
Jack P. Mrowka, Ph.D., Assistant Professor (geomorphology, hydrology,
Latin America). B.A., 1966, S.U.N.Y., Buffalo; M.A., 1969, Ph.D., 1974, U.C.L.A.

Clyde P. Patton, Ph.D., Professor (climatology, Western Europe, cultural geography). A.B., 1948, M.A., 1950, Ph.D., 1953, California.
Edward T. Price, Ph.D., Professor (North America, cultural geography, historical geography). B.S., California Institute of Technology, 1937 ; Ph.D., California, 1950.
Gary H. Searl, M.S., Adjunct Assistant Professor (geographic education, Oregon). B.B.A., 1959, M.S., 1966, Oregon.
Everett G. Smith, Jr., Ph.D., Professor (social geography, urban geography).
B.A., 1953, M.A., 1956, Illinois ; Ph.D., Minnesota, 1962. (On sabbatical leave, spring, 1979.)
Alvin W. Urquhart, Ph.D., Professor (cultural geography, Africa). B.A., 1953, M.A., 1958, Ph.D., 1962, California. (On sabbatical leave, spring 1979.)
Ronald Wixman, Ph.D., Visiting Acting Assistant Professor (Soviet Union, Eastern Europe, cultural geography). B.A., Hunter College, 1968; M.A., Columbia, 1972, Ph.D., 1978, Chicago.

## Faculty Emeriti

Samuel N. Dicken, Ph.D., Professor Emeritus (coastal geomorphology, cultural geography, Oregon). B.A., Marietta, 1924; Ph.D., California, 1930; at Oregon since 1947.

## Undergraduate Studies

Undergraduate students in geography develop an awareness of the landscapes of several regions of the world and investigate the physical and cultural processes which form landscapes. A major emphasis is given to the historical role of man in changing the face of the earth. All entering students are encouraged to take any lower-division course in geography. None have prerequisites
or require particular high school background. For students transferring to the University in their third year, preparation in introductory college geography courses is desirable.

An undergraduate major in geography may follow a broadly based general degree program or more specialized curricula which emphasize environmental studies, social science teaching, or urban studies. Both Bachelor of Arts and Bachelor of Science degrees are offered in the department.

## Major programs and requirements

I. General Geography Emphasis (B.A. or B.S.). Fifteen courses, of which ten must be upper division.

## (A) Physical Geography Courses :

Three courses selected from the following: Geog 101, The Natural Environment ; Geog 481, Geomorphology; Geog 482, Advanced Geomorphology; Geog 483, Geography of Water Resources; Geog 484, Geographical Hydrology; Geog 486, Climatology; Geog 487, World Regional Climatology; Geog 488, 489, Biogeography. (B) Cultural Geography: Three courses selected from the following: Geog 103, Landscape Environment, and Culture ; Geog 105, Urban Environment ; Geog 433, Political Geography ; Geog 434, Economic Geography ; Geog 435, Urban Geography; Geog 436, Cultural Geography ; Geog 437, Geographic Landscapes; Geog 438, Geography of Languages.
(C) Regional Geography: Three courses selected from the following: Geog 201, Geography of Europe ; Geog 202, Geography of Latin America; Geog 203, Geography of Asia; Geog 204, Geography of the Soviet Union; Geog 205, Geography of Africa; Geog 206, Geography of Oregon; Geog 467, Eastern North America; Geog 468, The American West; Geog 466, Cultural Geography of Africa; Geog 461, The South American Tropics; Geog 462, Southern South America; Geog 463, Geography of Middle America; Geog 464, Geography of Western Europe; Geog 465, Mediterranean Landscapes.
(D) Techniques of Geographers: Three courses selected from the following: Geog 180, Reading and Interpretation of Maps; Geog 313, Geographic Field Studies; Geog 312, Aerial Photo Interpretation and Remote Sensing ; Geog 311, Cartographic Methods; Geog 314, Geographic Application of Quantitative Methods; Geog 315, Geographic Research Materials; Geog 411, Advanced Cartography.
(E) Any research seminar for undergraduate majors, Geog 407.
(F) Electives in Geography : courses, seminars, reading and conference, research.
(G) Required for B.A.: Two years of foreign language or equivalent proficiency.

## II. Environmental Studies Emphasis

 (B.S.)(A) Geography: Fifteen courses of which ten must be upper division. of Maps; Geog 206, Geography of
(1) Basic Geography courses: Geog 101, The Natural Environment; Geog 103, Landscape, Environment, and Cu1ture; Geog 105, Urban Environment; Geog 180, Reading and Interpretation of Maps; Geog 206, Geography of Oregon.
(2) Advanced Geography courses: Four to be selected from: Geog 481, Geomorphology ; Geog 482, Advanced Geomorphology; Geog 483, Geography of Water Resources ; Geog 484, Geographical Hydrology; Geog 486, Climatology; Geog 488, Biogeography ; Geog 436, Cultural Geography; Geog 437, Geographic Landscapes.
(3) Geographic Techniques for Environmental Research : Five courses to be selected from: Geog 311, Cartographic Methods: Geog 312, Aerial Photo Interpretation; Geog 313, Field Methods; Geog 314, Geographic Application of Quantitative Methods; Geog 315, Geographic Research Materials; Geog 407 (required), any research seminar for undergraduate majors; Geog 411, Advanced Cartography. (B) Supporting Fields: eight courses from the following: Arch 221, Environment and Communication ; Arch 222, Environment and Cultural Milieu; Arch 223, Environment and Life Support ; Arch 321, 322, Environmental Control Systems; LA 225, Introduction to Landscape Architecture ; LA 226, Plant Communities and Environments; LA 361, Site Analysis ; CSPA 420, Behavioral Ecology ; Soc 210, Community, Population, and Resources; Soc 407, Seminar on Resource or Conservation Topic ; RPM 492, Recreation and Natural Resources; PS 458, Democracy and Public Policy ; Ec 202, Special Topics in Economics: Environmental Economics. Anth 320, Human Ecology ; Anth 470, Human Population Genetics; Bi 101, Selected Topics in Biology; Bi 102, Selected Topics in Animal Biology; Bi 104, Selected Topics in Plant Biology (see adviser for appropriate class); Bi 107, Human Population Genetics; Bi 272, Introduction to Ecology ; Bi 307, Evolution and Ecology; Bi 370, Man and His Environment; Bi 471, 472, 473, Principles of Ecology ; Bi 381, 382, Introduction to Bacteriology ;

Bi 438, Systematic Botany ; Bi 474, The Marine Environment ; Bi 475, Limnology ; Geol 321. Mineral Resources and the Environment : Geol 353, Oceanography: Geol 352, Geology of Oregon ; Ph 114, Pliysics of Energy and Pollution; Ph 116, The Sun as a Future Energy Source. Other courses with clearly identifiable environmental concerns or topics may be substituted.

## III. Urban Studies Emphasis

(A) Geography: Fifteen courses of which ten must be upper clivision.
(1) Basic Geography courses : Geog 101, The Natural Environment ; Geog 103, Landscape, Environment, and Culture; Geog 105, Urban Environment: Geog 180, Reading and Interpretation of Maps; Geog 206, Geography of Oregon.
(2) Advanced Geography courses : Nine to be selected from: Geog 433, Political Geography; Geog 434, Economic Geography ; Geog 435, Urban Geography ; Geog 436, Cultural Geography ; Geog 437, Geographic Landscapes; Geog 481, Geomorphology; Geog 483, Geography of Water Resources; Geog 311, Cartographic Methods; Geog 312, Aerial Photo Interpretation; Geog 313, Field Methods; Geog 314, Geographic Application of Quantitative Methods ; Geog 407 (required), any research seminar for undergraduate majors ; Geog 467, Eastern North America; Geog 468, Western North America.
(B) UP 350, Survey of Urban Planning.
(C) At least twelve courses from the following : Mth 101, 207, 208, Algebra, Calculus for the Nonphysical Sciences; Mth 156, Concepts of Statistics; Mth 150, Introduction to Probability ; CS 121, Concepts of Computing ; CS 133, Introduction to Numerical Computation; Ec 201, Introduction to Economic Analysis: Microeconomics ; Ec 202, Introduction to Economic Analysis: Macroeconomics: Ec 203, Selected Topics in Economics; Hst 207, Origins of World Civilizations ; Phl 221, Elementary Logic ; Soc 201, Introduction to Sociology; Soc 210, Communities, Population, and Resources; PS 203, State and Local Government; PS 230, Urban Politics; Psy 216, Social Psychology ; Anth 301, 302, 303, Society and Culture ; Anth 414, Race and Culture ; Ec 414, 415, 416, Regional and Urban Economics; Hst 301, 302, 303, Europe Since 1789 ; Hst 376, The American City in the 20th Century; Soc 303, World Population and Social Structure ; Soc 304, The Community ; Soc 442, Urbanization and the City ; Soc 447, Industrial Sociology ; PS 345,

Urban Politics ; PS 438, Urban Politics ; PS 490, 491, Community Politics ; Psy 461, Environmental Psychology ; Trn 349, Transportation and Distribution Systems ; Trn 351, International Transportation and Distribution Management; Fin 341, Introduction to Real Estate ; Fin 442, Real Estate Environmental Analysis ; Mkt 311, Marketing Systems and Demand Anaysis; CSPA 420, Behavioral Ecology ; CSPA 463, Metropolitan Government ; CSPA 465, 466, Administration of State and Local Government.

## IV. Secondary School Teaching of Social Studies

For basic certification as a teacher of social studies in Oregon high schools, the Teacher Standards and Practices Commission requires completion of an approved teacher education program which includes satisfaction of (1) certain requirements in subject matter preparation for the teaching endorsement, (2) certain requirements in professional education preparation, and (3) the recommendation of the institution at which the student completes the preparation.

For details of this program, consult the norm adviser for teacher education in the Department of Geography and the Office of Secondary Education in the College of Education.

Students must complete twelve courses in geography in which six are for upper-division credit. In addition, students must complete ten other social science courses in at least four fields other than geography.
The University will recommend for the Standard Teaching Certificate and Standard endorsements upon successful completion of a planned program of advanced teacher education; the plan must be filed with the Office of Teacher Certification in the College of Education at the time the work is initiated. Completion of work required for a master's degree does not satisfy requirements for either the Standard Teaching Certificate or endorsement, unless the degree work also includes certificate and endorsement requirements. Program planning forms and information relating to the University's Standard teacher education program may be secured from the Office of Teacher Certification.

## Honors College Program in Geography

The Honors College student in geography must do the following work in the department: Geog 313, Field Methods; Geog 436, Cultural Geography; Geog 437, Geographic Landscapes ; Geog 481, Geomorphology; Geog 486, Climatology ; Geog 488, Biogeography ; junior
and senior honors seminars : and senior honors thesis.

## Graduate Studies

Graduate work leading to both the Master of Arts and Doctor of Philosoplyy degrees is offered. The department also supervises those students wishing to obtain an interdisciplinary Master of Science degree with a major emphasis in geography. This degree combines course work in geography and in education.
Although the department requires knowledge of the fundamentals of geography, it welcomes students whose undergraduate work has been in other disciplines and who can apply their previous training to geographic problems. Field studies, seminars, and the preparation of theses form the heart of advanced geographic training.

## Admission

To apply for admission, send the Admissions Office the original copy of the application for admission form, and the application fee and transcripts as explained in the Graduate Studies section of this catalog. The Department of Geography should receive: (1) the four copies of the admission application ; (2) official transcripts of all undergraduate and graduate college work; (3) three letters of reference ; (4) score from the Miller Analogies Test or the Graduate Record Examination Aptitude Test; and, if planning to apply for an assistantship or fellowship, (5) the application for a graduate a ward. Preference for fall admission will be given to applicants whose papers are received by March 1.

## Master's Program

The M.A. degree in geography emphasizes general proficiency in physical and cultural geography and basic skills in the use of geographic techniques and methods through the following program of 45 graduate credit hours, at least 36 in geography. The program will include the following courses if not previously completed:
(1) These courses or their equivalent: Physical Geography (Geog 481, 486, 488) ; Cultural Geography (Geog 436,437 ) ; Field Geography (Geog 313 ) : Aerial Photographic Interpretation and Cartography (Geog 311, 312).
(2) Three graduate seminars in geography plus these courses: Advanced Physical Geography (Geog 522) ; Advanced Urban Geography (Geog 521) ; and Advanced Cultural Geography (Geog 523).
(3) Reading skill in one foreign language. Students will be expected to translate relevant passages from foreign sources in their graduate courses and seminars. Competence will be determined by the Geography Faculty.
(4) Thesis approved by a Geography Faculty Committee.
The interdisciplinary M.S. degree program requires 36 credit hours of work in geography and 9 to 15 credit hours in education. Courses and seminars parallel those of the M.A. candidates. Teaching skills are substituted for foreign language competence. A final oral examination by a committee of the geography faculty is required.

## Doctoral Program.

The Ph.D. program requires more specialization of the student who must demonstrate thorough knowledge of the geography of a major region of the world and competent understanding of one of the systematic fields of geography.

This program is designed to suit each indlividual's background and interests. In addition to a selection of seminars and courses, the candidate may use the flexibility of Geog 501 (Research) and Geog 505 (Reading and Conference) to follow specific interests with individual members of the faculty. The $\mathrm{Ph} . \mathrm{D}$. program, planned with faculty committee approval, is measured by achievement of the stated goals rather than by any specific number of credit hours. Prospective candidates should pay particular attention to the systematic specialization and regional interests of the staff before applying for admission.

Required for a Ph.D. in Geography are:
(1) Completion of a M.A. degree in geography or equivalent study which include courses required for the M.A. degree in geograply at the University of Oregon.
(2) Six graduate seminars including those taken for the M.A. degree plus these courses: Advanced Physical Geography (Geog 522) ; Advanced Urban Geography (Geog 521) ; and Advanced Cultural Geography (Geog 523).
(3) Reading knowledge of two foreign languages or speaking and reading knowledge of one foreign language.
(4) Passing a series of comprehensive, written examinations in these three subject areas: (a) regional geography of an area such as North America, Middle America, Arid Lands, or Western Europe ; (b) systematic field of geography such as geomorphology, climatology, biogeography, population and settlement geography, cultural
geography, urban geography, or economic geography; (c) geographic thought and method.
(5) An approved field of study in a department or departments suggested by the student.
(6) A dissertation presenting the results of research of a substantive and original nature on a significant geographic problem.

The dissertation must be approved by a faculty committee and presented at a public lecture.

All courses in geography taken by M.A. and Ph.D. candidates in geography are taken under the Pass/No Pass grade option.

## Financial Assistance

A limited number of graduate teaching fellowships with stipends ranging from approximately $\$ 3,000$ to $\$ 4,000$ for the academic year, September to June, are available. A few fellowships, for smaller stipends, are also available for summer sessions. Fellows are charged reduced tuition fees. Graduate teaching fellows usually register for 9 to 12 credit hours of coursework per term and are assigned duties limited to 12 to 15 hours a week. Applications for fellowships should be received by March 1.

The Work-Study Program (under federal funding for students from lowincome families) provides an alternative means of financial assistance. The Department of Geography has several positions under this program at a maximum of 20 hours per week and rate of approximately $\$ 2.50$ per hour. For certification under Work-Study and for applications for loans or grants, a separate request for forms should be made to the Office of Financial Aids.

## Undergraduate Courses

Geog 101. The Natural Environment. 3 credit hours. An introductory physical geography of the earth with special emphasis on vegetation, landforms, climate, and soils. Mrowka, Johannessen.
Geog 103. Landscape, Environment, and Culture. 3 credit hours. An introductory cultural geography that focuses on the ways in which various cultures have evaluated, used, and modified the landscapes and environments they have occupied. Urquhart.
Geog 105. Urban Environment. 3 credit hours. An introductory urban geography with emphasis on sites and situations of cities and on patterns of land use at urban locations around the world. Smith.
Geog 180. Reading and Interpretation of Maps. 3 credit hours. Introduction to the interpretation of physical and cultural features on maps. Critical analysis of cartographic styles employed by atlas and map makers.
Geog 199. Special Topics in Geography. 3 credit hours.

Geog 200. SEARCH. 1-3 credit hours. Geog 201. Geography of Europe. 3 credit hours. An introduction to geography through the study of the physical and cultural processes that have shaped the rural and urban landscapes of Europe.

## Geog 202. Geography of Latin America.

 3 credit hours. An introductory geography focusing on the ways in which major cultural groups have modified the environments of Latin America throughout history. Mrowka.Geog 203. Geography of Asia. 3 credit hours. An introduction to the major physical and cultural realms of Asia, excluding Soviet Asia.
Geog 204. Geography of the Soviet Union. 3 credit hours. Natural regions, major population groups, and the economic development of the U.S.S.R. Wixman.
Geog 205. Geography of Africa. 3 credit hours. An introduction to geography through the study of the physical and cultural processes that have shaped the rural and urban landscapes of Africa. Urquhart.
Geog 206. Geography of Oregon. 3 credit
hours. The nature of Oregon : its natural and human resources, changing patterns of settlement, urbanization and economic development, and problems of environmental use. Searl, Loy.
Geog 311. Cartographic Methods. 3 credit hours. Introduction to map design, construction, and projections. Loy.
Geog 312. Aerial Photo Interpretation. 3 credit hours. Introduction to the use of aerial photographs and other forms of imagery. Loy.
Geog 313. Geographic Field Studies. 3 credit hours. Research techniques in geography applied to local areas and problems.
Geog 314. Geographic Application of Quantitative Methods 3 credit hours. An introduction to quantitative methods used in physical and cultural geography, their significance and limitations. Open to majors only.
Geog 315. Geographic Research Materials. 3 credit hours. Introduction to library materials in the University of Oregon libraries which are applicable to the fields of geography and urban planning. The course also studies statistical sources for geographic research and studies alternative means of gaining information throughout a state.
Geog 400. SEARCH. 1-3 credit hours.
Geog 401. Research. Credit hours and topics to be arranged.
Geog 405. Reading and Conference. Credit hours and topics to be arranged.
Geog 406. Field Studies. Credit hours and topics to be arranged.
Geog 407. Seminar. Credit hours to be arranged. The following seminar topics will be offered 1978-79. Enrollment in each is limited to 15 under graduate majors in geography. Maximum of 3 credit hours for each. Domestication of Plants and Animals: The process of domestication of plants and animals will be investigated through readings and library research. The beginnings of agriculture will be explored. Johannessen. Gazetteer of Lane County: The subject of computerized gazetteers will be investigated with discussion of a geographic base file; practice in data encoding, entry, and writing on a CRT terminal ; and field research on selected names to help complete the historical portion of a Lane County gazetteer. Loy.
Geomorphology of Oregon: An analysis of the spatial variation in the landforms and geomorphic processes in Oregon. Mrowka.

Geographic Origins of American Towns: Sites, settlers, plats, persistence, function, environment. Price.

## Landscapes of Eugene-Springfield: The

 tangible physical landscapes of the urban area will be studied from the perspective of their creators and users and of their origins and persistence. Urquhart.Geography of the Soviet Union: Regional patterns and geographic problems. Wixman.
Geog 408. Workshop. Credit hours to be arranged.
Geog 409. Supervised Tutoring. Credit hours to be arranged. A no-grade course.
Geog 410. Environmental Alteration. 3 credit hours. The human alteration of natural systems and the environment. The consequences of human activity at different times and places in regard to soils, climate, vegetation, landforms, and water.

## Upper-Division Courses <br> Carrying Graduate Credit

Geog 410. Experimental Course. (G) 3 credit hours. Soviet Nationalities: Geographic patterns and social conflicts involving diverse cultural groups in the U.S.S.R. Wixman
Geog 411. Advanced Cartography. (G) 3 credit hours. Advanced map construction, preparation of graphs and diagrams, and a final individual project. Loy.
Geog 433. Political Geography. (G) 3 credit hours. Global political patterns and variable resources ; impact of boundaries on the landscape; voting distributions; and locations and consequences of differing jurisdictions. Patton.
Geog 434. Economic Geography. (G) 3 credit hours. Resource use and availability, patterns of economic activity, and processes influencing the location and operation of economic systems. Smith.
Geog 435. Urban Geography. (G) 3 credit hours. Urbanization throughout the world; the structure of urban settlements; cities as regional centers, physical places, and homes for people; geographic problems in major urban environments. Prerequisite : upper division or graduate standing. Smith.
Geog 436. Cultural Geography. (G) 3 credit hours. Growth of man's exploitation of his habitat. Origin and spread of ways of living. Prerequisite: Geog 103. Price.
Geog 437. Geographic Landscapes. (G) 3 credit hours. Concepts and examples of the cultural landscape. Prerequisite: Geog 103. Urquhart.
Geog 438. Geography of Languages. (G) 3 credit hours. The present distribution of languages in the world-who, where, and how many. Sketches the historical evolution of the present mosaic of linguistic patterns and discusses the significance of the distribution of other cultural phenomena to languages. Patton, Wixman.
Geog 461. The South American Tropics. (g) 3 credit hours. The Andes and the Amazon: an analysis of tropical highland and tropical lowland natural environments, in terms of their settlement history, and present use. Mrowka.
Geog 462. Southern South America. (g) 3 credit hours. An analysis of the natural environments of Argentina, Chile, Uruguay, and Paraguay, their settlement history, and present use. Emphasis on the physical and cultural processes and their spatial characteristics within this region. Mrowka.

Geog 463. Geography of Middle America. (g) 3 credit hours. Physical, historical and cultural processes that have shaped the landscapes of Mexico, Central America, and the Caribbean Islands. Prerequisite: 6 credit hours of lower-division geography.
Johannessen.
Geog 464. Geography of Western Europe. (g) 3 credit hours. Natural environments, cultural groups, and distinctive regional landscapes of western Europe. Patton.
Geog 465. Mediterranean Landscapes. (g) 3 credit hours. The Mediter ranean environments. Imprints of cultural groups on the landscape. Geographic problems of the area. Prerequisite : 6 credit hours of lower-division geography. Loy.
Geog 466. Cultural Geography of Africa. (g) 3 credit hours. Study of African cultural landscape. Prerequisite: 6 credit hours of lower-division geography. Urquhart.
Geog 467. Eastern North America. (g) 3 credit hours. Growth of major regions from Atlantic colonies. Agriculture, industry, population, and metropolitan centers. Price.
Geog 468. Western North America. (g) 3 credit hours. Areas of attraction and aversion. Their development into modern regions. Price.
Geog 481. Geomorphology. (G) 3 credit hours. Systematic study of the land-forming processes in the physical landscape with emphasis on fluvial processes. Maps and air photos as primary tools of geomorphic investigation. Prerequisite : Geol 101, 102, or Geol 201, 202. Mrowka.
Geog 482. Advanced Geomorphology. (G) 3 credit hours. A detailed examination of one of the principal land-forming processes, their characteristics in time and space, and the resulting landforms. The particular landforming process to be discussed will vary, each term the course is offered, from among the following topics: glaciers and glacial processes, aeolian (wind) processes, rivers and fluvial processes, coastal processes, and hillslope processes. Prerequisite : Geog 481 or consent of instructor. Mrowka.

## Geog 483. Geography of Water Resources.

 (G) 3 credit hours. Human interactions with and impacts on the hydrologic system, with emphasis on the spatial and temporal character of these interactions on global, regional and local levels. Topics to be discussed include both direct and indirect interactions, cloud seeding, channelization, water transfers, desalinization, dams and reservoirs, flood control, river regimes, irrigation, water utilization, land use, ground-water use, agricultural practices, deforestation, reforestation, urban hydrology, and water pollution. Mrowka.
## Geog 484. Geographical Hydrology. (G)

 3 credit hours. The geography of water, the spatial distribution of water, and the factors which control this distribution on a global and regional scale. The topics discussed include present global water storages and fluxes, the hydrologic cycle, evaporation, precipitation, interception, surface runoff, soil moisture, groundwater flow, hydrograph analysis, floods and river regimes. Mrowka.Geog 486. Climatology. (G) 3 credit hours. Elements of climate: the heat and water balance at the surface of the earth, atmospheric processes that affect climate, factors of climatic change. Prerequisite: 6 credit hours of lower-division geography. Patton.

## Geog 487. World Regional Climatology.

 (G) 3 credit hours. Problems in climatic classification. Description and explanation of the distribution of climates on the surface of the earth. Prerequisite: Geog 486. Patton.Geog 488, 489. Biogeography. (G) 3 credit hours each term. Relation of plants and animals to the environment; distribution of individual species; historical changes in plant distribution; aerial photo interpretation and mapping of vegetation; domestication of plants and animals. Johannessen.

## Graduate Courses

Geog 501. Research. Credit hours and topics to be arranged. A no-grade course.
Geog 502. Supervised College Teaching.
Credit hours to be arranged. No-grade course.
Geog 503. Thesis. Credit hours to be arranged. No-grade course.
Geog 505. Reading and Conference. Credit hours and topics to be arranged.
Geog 506. Field Studies. Credit hours and topics to be arranged.
Geog 507. Seminar. The following topics are offered in graduate seminars for 1978-79:
Transoceanic Diffusion. Johannessen.
Recent Developments in Geomorphology. Mrowka.
Problems in Cultural Geography. Patton.
Historical Geography of North America. Price.
Land Subdivision in the Willamette Valley. Urquhart.
Geog 508. Workshop. Credit hours to be arranged.
Geog 509. Supervised Tutoring. Credit hours to be arranged.
Geog 510. Experimental Course. Credit hours to be arranged.
Geog 521. Advanced Urban Geography.
3 credit hours. Overview of the basic laterature and current developments in urban geography. Required of all first-year graduate students.
Geog 522. Advanced Physical Geography. 3 credit hours. Overview of the basic literature and current developments in physical geography. Required of all first-year graduate students.
Geog 523. Advanced Cultural Geography. 3 credit hours. Overview of the basic literature and current developments in cultural geography. Required of all first-year graduate students.
Geog 555. History of Geographic Thought. 3 credit hours. Development of concepts of the earth and of man's relation to it ; ends and means of geographic study. Price.

## Geology

## Faculty

Sam Boggs, Jr., Ph.D., Department Head, Professor of Geology (sedimentation and sedimentary petrology). B.S., Kentucky, 1956 ; Ph.D., Colorado, 1964.

Brian H. Baker, Ph.D., Associate Professor of Geology (structural geology and tectonics). B.Sc., Birmingham
(England), 1949 ; Ph.D., University of East Africa, 1971.
Ewart M. Baldwin, Ph.D., Professor of Geology (stratigraphy and regional geology). B.S., 1938, M.S., 1939, Washington State ; Ph.D., Cornell, 1943. (On leave fall 1978.)

Gordon G. Goles, Ph.D., Professor of Chemistry and Geology (geochemistry). A.B., Harvard, 1956; Ph.D., Chicago, 1961.
William T. Holser, Ph.D., Professor of Geology (mineralogy and geochemistry). B.S., 1942, M.S., 1946, California Institute of Technology ; Ph.D., Columbia, 1950.
M. Allan Kays, Ph.D., Associate Professor of Geology (metamorphic and igneous petrology). B.A., Southern Illinois, 1956 ; M.A., 1958, Ph.D., 1960, Washington Unịversity.
Alexander R. McBirney, Ph.D., Professor of Geology (igneous petrology, volcanology). Director, Center for Volcanology, B.S., U.S. Military Academy, West Point, 1946; Ph.D., California, Berkeley, 1961. (On leave winter and spring 1978-79.)
William N. Orr, Ph.D., Associate Professor of Geology (micropaleontology and biostratigraphy). B.S., Oklahoma, 1961 ; M.A., California, Riverside and Los Angeles, 1963 ; Ph.D., Mịchigan State, 1967.
Jack M. Rice, Ph.D., Assistant Professor of Geology (geochemistry). A.B., Dartmouth, 1970 ; M.S., 1972, Ph.D., 1975, Washington.
Norman M. Savage, Ph.D., Associate Professor of Geology (Paleozoic paleontology and stratigraphy). B.Sc., Bristol, 1959 ; Ph.D., Sydney, 1968.
Harve S. Waff, 'Ph.D., Assistant Professor of Geology (experimental geophysics at high pressures). B.S.,
William and Mary College, 1962 ; M.S. 1966, Ph.D., 1970.
Daniel F. Weill, Ph.D., Professor of Geology (experimental petrology and geochemistry). B.A., Cornell, 1956 ; M.S., Illinois, 1958 ; Ph.D., California, Berkeley, 1962.

Adjunct and Courtesy Faculty
Arthur J. Boncot, Pl.D., Professor of Geology, Oregon State University ;
A.B., 1948, Harvard College ; A.M., 1949, Ph.D., 1953, Harvard.
Jane Gray, Ph.D., Professor of Biology ; B.A., 1951. Radcliffe ; Ph.D., 1958, California, Berkeley.
Allan B. Griggs, Ph.D., Research Geologist (Regional and Economic Geology), U.S. Geological Survey, retired. B.S., 1932, Oregon; Ph.D., 1952, Stanford.

## Special Staff

John Longhi, Ph.D., Research Associate in Geology (Lunar petrology). B.S., Notre Dame, 1968 ; Ph.D., Harvard, 1976.

Terry F. Montlick, M.S., Research Assistant in Geology (electron microprobe and scanning electrons microscope). B.S., Mass. Inst. of Tech., 1972 ; M.S., Oregon, 1974.

## Faculty Emeriti

Ernest H. Lund, Ph.D., Professor Emeritus of Geology (general geology), B.S., Oregon, 1944 ; Ph.D., Minnesota, 1950; at Oregon since 1957.
Lloyd W. Staples, Ph.D., Professor Emeritus of Geology (mineralogy, economic and engineering geology). A.B., Columbia, 1929 ; M.S., Michigan, 1930 ; Ph.D., Stanford, 1935 ; at Oregon since 1939.

## Undergraduate Studies

Geology studies the materials and processes that have shaped the earth, moon, and planets, and that have generated our surface environment and mineral resources. It applies all of the basic sciences-biology, chemistry, mathematics, and physics-to the understanding of these processes, and, furthermore, does this in the historical context of geological time. It is a science that explores these problems by combining field investigations with laboratory experiments and theoretical studies.

An undergraduate degree with a major in geology (Bachelor of Science or Bachelor of Arts) is most often preparation for professional graduate study leading to the master's degree or the Doctor of Philosophy degree; one of these degrees is required for most professional employment, as in the petroleum, mining, and construction industries, in government surveys, or in college teaching. An undergraduate degree may also serve as a strong background for high school teaching, or for a broad education.

High school students planning to major in geology at the University are advised to include in their high school program : algebra, geometry, trigonometry, geography, science (physics, chemistry, biology, or general science). Transfers from two-year colleges should have completed the basic requirements listed below for lower-division students, and as many as possible of the University requirements for undergraduates.

Two curricular options are available under the major in geology.

Curriculum in Geology. In this program, lower-division students are required to take General Geology (Geol 201, 202, 203, 4 credit hours each, recommended ; but Geol 101, 102, 103, 3 credit hours each, plus Geol 104, 105, 106, 1 credit hour each, may be substituted) ; a year-course in Calculus (Mth 204, 205, 206, 5 credit hours each; or Mth 201, 202, 203, 4 credit hours each) ; General Chemistry (Cl 104, 105, 106, 3 credit hours each) ; Introductory Chemistry Laboratory (Ch 107, 2 credit hours) ; Introductory Analytical Chemistry (Ch 108, 109, 2 credit hours each ; and General Physics (Ph 201, 202,203 , or $211,212,213,4$ credit hours each). Upper-division students are required to take Mineralogy (Geol $325,326,327,4$ credit hours each) ; Structural Geology (Geol 391, 4 credit hours) ; Stratigraphy and Sedimentation (Geol 392, 3 credit hours) ; Field Geology (Geol 406, 9 credit hours) ; Scientific and Technical Writing (Wr 227, 3 credit hours) ; either Economic Mineral Deposits (Geol 423, 3 credit hours) or Thermodynamic Geochemistry (Geol 461, 3 credit hours) ; and Petrology and Petrography (Geol 414, 415, 416, 4 credit hours each). Depending on individual interests and plans for graduate study, students are expected to take additional courses outside of the Department, for example, Classical Mechanics (Ph 324, 325, 326, 3 credit hours each) ; Physical Chemistry (Ch 441, 442, 443,4 credit hours each) ; Fundamentals of Statistics (Mth 346, 3 credit hours) or Elements of Statistical Methods (Mth 425, 426, 427, 3 credit hours each), and Introduction to Differential Equations (Mth 461, 3 credit hours).

Curriculum in Geology-Paleontology. Lower-division students are required to take General Geology (Geol 201, 202, 203, 4 credit hours each, recommended ; but Geol 101, 102, 103, 3 credit hours each, plus Geol 104, 105, 106, 1 credit hour each, may be substituted) ; College Algebra (Mth 101, 4 credit hours) ;

Elementary Functions (Mth 102, 4 credit hours) ; Concepts of Statistics (Mth 156, 3 credit hours) ; General Chemistry (Ch 104, 105, 106, 3 credit hours each) ; Introductory Chemistry Laboratory (Ch 107, 2 credit hours) ; Introductory Analytical Chemistry ( Ch 108, 109, 2 credit hours each ) ; General Physics (Ph 201, 202, 203, 4 credit hours each) ; and a minimum of 18 hours of biology courses chosen from Bi 242, Bi 301-307, and Bi 413-495. Upperdivision students are required to take Mineralogy (Geol 325, 326, 327, 4 credit hours each), Paleontology (Geol 431, 432, 3 credit hours each) ; Stratigraphy and Sedimentation (Geol 392, 3 creclit hours) ; Field Geology (Geol 406,9 credit hours) ; Scientific and Technical Writing (Wr 227, 3 credit hours) ; Lithology (Geol 411, 3 credit hours) ; Structural Geology (Geol 391, 4 credit hours).

Geology undergraduates must take for grade (pass/no pass not acceptable) all geology courses required in their option for graduation. Required courses taken outside the geology department (e.g., mathematics; chemistry, physics, biology, scientific and technical writing) must also be taken for grade. All required courses must be completed with a grade of C or better (D grade not acceptable).

Curriculum in Secondary School TeachTeaching: Students who are interested in teaching Earth Science in the public schools of Oregon may obtain certification in this field through a major in either Geology or General Science. Certification as a teacher of science in Oregon public junior or senior high schools requires satisfactory completion of a program of teacher education which includes subject matter preparation in the sciences and in professional education, plus the recommendation of the institution in which the preparation is completed. The Department of Geology offers work leading toward an Oregon teaching endorsement in specified science fields at the Basic and Standard certification levels, as determined by the Oregon Teacher Standards and Practices Commission. The University's prograns to prepare science teachers are subject to revision to meet changes in certification requirements mandated by the Commission effective January 1, 1980. For specific information regarding requirements for one of the science teaching endorsements, students should contact the geology department's endorsement adviser for teacher education, and the Office of Secondary Education in the College of Education.

## Graduate Studies

The department offers programs of graduate study covering the wide range of interests inclicated in the list of faculty. Many of the research programs combine the most recent techniques of both laboratory and field observation to solve geological problems. The location of Eugene between the volcanic rocks of the Cascades and Columbia Plateau to the east, the Tertiary sediments of the Coast Range to the west, and the Mesozoic and Paleozoic sedimentary, plutonic, and metamorphic complex of the Klamath and Trinity mountains to the south, provides abundant local opportunity for field study. Recent expeditions have conducted studies throughout the world, from Greenland and Arctic Canada to the Galapagos and Kenya.

Programs of study are offered leading toward Master of Science, Master of Arts, and Doctor of Philosophy degrees. Admission to the graduate program is competitive, and based on earlier acàdemic record, scores of the Graduate Record Examination, and letters of recommendation. Applications are welcome from students in related fields, such as physics, chemistry, and biology, who have an interest in applying their background to the solution of geological problems.

Incoming graduate students will be expected to have an undergraduate preparation approximately equivalent to that of the baccalaureate degree in geology at the University of Oregon. As one measure of background, applicants for admission will have been asked to submit results of the GRE Advanced Geology examination. Where these results fall below the departmental standard ( 65 percentile) in any of the three areas, the student's guidance committee will work out with the student a course schedule designed to correct that deficiency. The primary basis for this schedule will be a comparison of the student's undergraduate course record in the pertinent area of geology with the undergraduate requirements for geology majors at the University of Oregon, as indicated in the General Catalog. A second specific measure of background is training in field geology, which is not covered by the GRE Advanced Geology examinations ; a deficiency in this area will generally be corrected by taking Geol 406 or an equivalent course. Course work taken to correct deficiencies may be on a pass/no pass or graded basis, or with the approval of the student's guidance committee, by registered audit or by challenge.

Advising responsibility to graduate students is met by assigning each stuclent to a guidance committee consisting of three faculty members. This committee meets with the student shortly after he or she arrivès on campus and as often thereafter as necessary for planning purposes. Once a $\mathrm{Pl} . \mathrm{D}$. student has been formally accepted into the Ph.D. prograin and has chosen a thesis adviser, the guidance committee is dissolved and is replaced with the student's advisory committee. The guidance committee for master's candidates remains in operation during the residence of the student.

The University requirements for graduate degrees are detailed in the Graduate School section of this catalog ; the Department of Geology sets the following additional requirements. A minimum proficiency in three general areas of geology is required of all gladuate students. This requirement is met by the Graduate Record Examination, Advanced Test in Geology, for which scale subscores are given in three areas of geology. Passing scores are 65 percentile in each of the three areas and an average score of 80 percentile; these are converted from the scaled subscores by the normative data published at the time the test was taken.

Students are allowed to pass individual parts of the Advanced Test in Geology at different sittings and may either average these passing scores to achieve the overall average of 80 percentile, or may use a passing comprehensive score achieved on a single examination. Students who have taken the Advanced Graduate Record Examination and exceed these requirements before admission are exempted from further qualifying examination, but those who have not met these requirements should take and pass the GRE Advanced Test in Geology during their first year in the department. Students who anticipate difficulty in meeting this requirement, such as students who majored in disciplines other than geology or who have attempted the examination and failed, may petition for a time extension.

A thesis is required for master's degrees, based on a proposal circulated to the faculty of the department for comment and approval. A student may earn up to 15 hours of credit for thesis, but only 9 will apply towards the 45 credit hours required for the degree by the Graduate School. Up to 15 hours of graduate-level courses in related sciences may be applied toward fulfilling the 45-hour requirement. Master's candidates must earn 30 graded graduate credit hours in classroom courses
exclusive of independent work such as research, thesis, and reading and conference, and at least 9 of the 30 hours must be in courses numbered 500-599. Only 6 of the required 30 hours may be transferred from other institutions. An examining committee for defense of the master's thesis consists of at least three faculty one of whom may be from outside the department.

After a student working toward a Ph.D. has passed the three qualifying examinations described above, the student's qualifications will be considered by the full faculty for acceptance into the Ph.D. program. After acceptance, the student will arrange with a faculty member to be thesis adviser and chairman of the student's advisory committee, which will consist of four or more members (including one from outside the department) appointed by the department head. The student's course program is determined by the guidance committee and the advisory committee and will include a minimum of 15 credit hours of graduate level work in related sciences. A student may petition to substitute appropriate graduate level course work completed at another institution to fulfill this requirement. The program should also include 30 credit hours of graded work in graduatelevel geology courses, exclusive of research, thesis, and reading and conference. Six of these 30 hours may be transferred from other institutions. Proficiency must be demonstrated in one foreign language pertinent to the student's field of work, by two years college course work (GPA 2.5), GSFLT score ( 50 percentile), or a reading examination administered by a designated faculty member of the department. Proficiency in German may also be demonstrated by successful completion of German for Reading Knowledge (GL 321, 322, 323).

The comprehensive examination is intended to determine the Ph.D. student's preparation in the special field of the thesis research and is taken after the student has satisfied the language requirement and completed most of the course work.
The examination may be written or oral or both ; its form will be determined by the examination committee, which will be selected by the student's advisory committee, and may include the advisory committee and other invited persons. The student should arrange with his or her advisory committee to take this examination prior to the end of the student's second academic year in residence. Extension of this time miay be granted by petition. If the student fails the examination, he or she may be
allowed to repeat the examination at a later date by majority vote of the student's advisory committee. On passing the comprehensive examination, the student is advanced to candidacy.

A thesis is required for the Pl.D. degree. The student must have a dissertation committee appointed by the Graduate School. This committee normally is composed of members of the advisory committee but must include one member of the graduate faculty who is not a member of the geology department.
The committee is selected by the departmental chairman, in consultation with the student and thesis adviser, and must be approved by the Dean of the Graduate School. Membership of the Committee should be proposed to the Dean of the Graduate School one month after advancement to candidacy and no later than six months before the date when the candidate is expected to complete the dissertation.
Current regulations of the Graduate School require a formal public defense of the thesis. Policy of the Department of Geology stipulates further that the dissertation committee meet with the candidate for an examination on the thesis after it is sufficiently completed for presentation, but at an early enough date to allow required changes to be made before the final thesis is presented for signature.
All graduate students are required to present a public seminar of at least 30 minutes duration at least once every two years during their residence in the department. Talks presented at recognized scientific meetings may, with faculty approval, be substituted to meet the seminar requirement.
Graduate awards in the department include teaching and research fellowships. Research fellows are selected by individual faculty members who have grant-supported research, and persons for the other awards are selected by a committee of three faculty members. Primary consideration in making the selection is academic promise. A second factor is the person's ability to perform the work that needs to be done in connection with the appointment. A student's financial need is also considered.

Teaching fellowship awards are made for a single academic year, on a competitive basis. A student who is currently holding a teaching fellowship will be reappointed if the student has maintained a GPA of at least 3.0 , if satisfactory progress is being made towards completion of the degree, and if funds are available to the department. A master candidate may receive support for a maximum of two years and a

Ph.D. candidate for a maximum of four years on awards made by the department or on awards for which the department selects the recipient. Research fellowships are not subject to the maximum tenures outlined above.

Students are urged to apply for financial support from outside the department whenever possible. Grants are made directly to graduate students by organizations such as the Geological Society of America, Sigma Xi, American Association of Petroleum Geologists, National Science Foundation, and other government agencies.

The department administers a small student research fund to assist graduate students in their research and preparation of thesis. This fund is supported by unrestricted grants from petroleum and mining companies. Proposals may be submitted to the chairman of the student research fund committee. Small awards to graduate and undergraduate students are also made from time to time, as funds permit, from the Condon Fellowship, Stovall Fellowship, Staples Fellowship, and the Maynard Fellowship.

The department has a fund for making small, short-term loans to "students in financial distress." The department head authorizes these loans on the recommendation of the member of the faculty assigned responsibility for the loan fund (usually the chief adviser).

## Center for Volcanology

The Department of Geology includes a Center for Volcanology; the staff of the Center includes faculty whose principal interests are in the fields of igneous petrology, volcanic geology, geochemistry, and geophysics. Oregon and the Pacific Northwest provide exceptional opportunities for field study of volcanic rocks and structures. The facilities at Eugene include equipment for analysis of rocks and minerals by a wide range of modern procedures, as well as for synthetic studies.

## Undergraduate Courses

Geol 101, 102, 103. General Geology. 3 credit
hours each term. An introduction to the
Earth and the main events of the Earth's history that have shaped it. For students, including those not intending to major in the sciences, who want a basic understanding of their planet. Geol 101 : general introduction to the Earth as an evolving planet; geological time scale ; rocks and minerals; the Earth's surface features; weathering ; erosion; groundwater; streams; glaciers; deserts; oceans; sedimentation. Geol 102 : the Earth's internal heat engine ; igneous rocks; volcanism ; metamorphism; earthquakes and the Earth's interior structure ; geomagnetism;
gravity ; plate tectonics; rock deformation ; resources of matter and energy; geology of the planets. Geol 103 : time-historical account of the Earth's history ; the fossil record of life ; reconstruction of paleogeography. The normal sequence may be started either in the fall or winter term. Students wishing to take these courses out of sequence may do so with consent of the instructor. The complementary laboratory sequence (Geol $104,105,106$ ) is recommended, but not required. Three lectures per week and one optional field trip per term (for which there is a transportation charge). Baker, Baldwin, Goles, Kays, Rice, Savage, Waff, Weill.

## Geol 104, 105, 106. General Geology

 Laboratory. 1 credit hour each term. Laboratory studies recommended to supplement and complement the correlative parts of Geol 101, 102, 103. Identification and properties of minerals and rocks, how to read topographic and geologic maps and use aerial photographs, reproduction of geological processes by model studies, fossils as evidence of evolutionary processes. One two-hour session per week. Previous or concurrent registration in corresponding lecture course in Geol 101, 102, 103 is required. Staff. Geol 199. Special Studies. 1-3 credit hours. Studies of special geologic topics that will combine background lectures with guided field trips to areas of particular geologic interest. Open to students in any field. Staff. Geol 201, 202, 203. General Geology. 4 credit hours each term. An introductory course in geology that covers the same general ground as Geol 101, 102, 103, but on a more detailed scale for science majors, Honors College students, and other students with backgrounds in chemistry, physics, and mathematics. Three lectures, one two-hour laboratory, field trips. McBirney, Baker, Orr.
## Geol 291. Rocks and Minerals. 3 credit

 hours. Common minerals and rocks; origin, and properties of previous, semiprecious and ornamental stones; economically important rocks and minerals. A course for nonmajors that does not require previous work in geology. Two lectures; one three-hour laboratory period. Prerequisite : chemistry at high-school level.Geol 292. Volcanoes and Earthquakes. 3 credit hours. An elementary course for the general student as well as for majors in geology, designed to give the student an understanding of the forces and manifestations of volcanism and seismic activity. Emphasis on practical aspects, including the hazards of living in regions of strong earthquake activity, potentialities of geothermal resources, and the role of volcanism in forming the landscape of Oregon. Open to students in any field. Two lectures, one Saturday or Sunday field trip (transportation charge). McBirney.
Geol 301. Fossils and the Origin of Life. 3 credit hours. Origins of the Earth and solar system; a model for the origin of life in the Precambrian; Precambrian fossil evidence; evolution of plants and invertebrate animals. Intended for juniors and seniors majoring in areas other than geology. Savage.

## Geol 302. Fossil Dinosaurs and Lower

 Vertebrates. 3 credit hours. The evolution of fish, amphibians, reptiles, and dinosaurs; discussion of evolution, migrations, and extinctions of the lower vertebrates. Intended for juniors and seniors majoring in areas other than geology. Savage.Geol 303. Fossil Mammals. 3 credit hours. Appearance of the early mammals and their subsequent history; comparative morphology of mammals ; discussion of evolution, migrations, and extinctions of the mammals.

Intended for juniors and seniors majoring in areas other than geology. Orr.
Geol 321. Mineral Resources and the Environment. 3 credit hours. The physical aspects of man's relation to his environment : sources, limits and hazards of resources of fossil fuels, nuclear energy, metals and nonmetals ; and geological hazards. The scientific principles that underlie these central problems, and that are the basis for future planning, will be presented. Open to students in any field. Winter term. The complementary course Bi 370. The Human Environment, considers the biological and social aspects of man's environment. Three lectures (brief discussions welcomed during lectures), term projects. Goles.
Geol 325, 326, 327. Mineralogy. 4 credit hours each term. A general introduction to the minerals that constitute the common rocks and ore deposits : description, determination, and occurrence. Geol 325 : crystal structure, symmetry, physical and chemical properties of minerals, X-ray powder diffraction; Geol 326: optimal crystallography, polarizing microscope, description, identification, and occurrence of nonsilicate minerals; Geol 327 : description, identification, and occurrence of silicate minerals. Two lectures, two laboratories. Prerequisite: Ch 104, 105, 106; Ch 107, 108, 109 ; Geol 201, 202, or 101, 102, high schol trigonometry, or Mth 115 or Mth 102. Holser.

## Geol 352. Geology of Oregon. 3 credit

 hours. Lectures, assigned reading, and field trips, to acquaint the student with some of the salient features of the geology of the state. Open to students in any field. Two lectures, two field trips (for which there is a transportation charge). Baldwin.
## Geol 353. Oceanography. 3 credit hours.

 An introduction to the physical, chemical, and biological processes of the world's oceans. Emphasis on the history and geology of the ocean basins. Special section on ocean pollution, ecology and law. Open to students in any field. Two lectures, demonstration/ discussion section, Saturday or Sunday field trip (for which there is a transportation charge). Orr.
## Geol 354. Geology of the Moon and

Planets. 3 credit hours. An introduction to the results of recent exploration of the lunar surface and of observations of the planets; inferences from the studies of meteorites; relations to the early history of the Earth. Open to students in any field. Three lectures. Goles.
Geol 391. Structural Geology. 4 credit hours. Description, classification and origin of major and minor geologic structures; mechanics of rock deformation; use of stereographic projection in structural analysis; exercises on geologic maps and sections. Three lectures, one laboratory. Prerequisite : Geol 101, 102, 104, 105, or 201, 202. Baker. Geol 392. Stratigraphy and Sedimentation. 3 credit hours. A general introduction to stratified rocks and the utility of integrating sedimentologic, paleontologic, and geochemcal evidence to effect correlations and reconstruct paleoenvironments. Topics explored include the textural and mineralogical properties and field relationships of sedimentary rocks, concepts of physical stratigraphy and biostratigraphy, and modern and ancient depositional, sedimentary environments. Three lectures per week, one Saturday or Sunday field trip (for which a transportation fee is required). Prerequisites : Geol 201, 202, 203. Boggs.

[^0]Geol 405. Reading and Conference. Credit hours to be arranged. A no-grade course.

## Upper-Division Courses Carrying Graduate Credit

Geol 407. Seminar. (G) Credit hours to be arranged.
Geol 410. Experimental Course. (G) Credit hours to be arranged.
Geol 411. Lithology. (g) 3 credit hours. The origin, occurrence, and classification of rock types. Laboratory examination and classification of rocks in hand specimens. Two lectures, one laboratory. Prerequisite: Geol 326. Kays. Geol 412. Written and Spoken Exposition of Geology. 1 credit hour. Practice in the organization, preparation, and presentation of geological reports. Staff.
Geol 414, 415, 416. Petrology and Petrography. (G) 4 credit hours each term. Origins, occurrences, and classifications of rocks. Laboratory work in both megascopic and microscopic examination of rocks. Geol 414 : igneous rocks; Geol 415 : metamorphic rocks; Geol 416; sedimentary rocks. Two lectures, two laboratories. Prerequisites: Ph 201, 202, 203; Geol 325, 326, 327. McBirney, Kays, Boggs.
Geol 417. Electron Beam Analysis in Mineralogy and Petrology. (G) 4 credit hours. Theory and application of electron probe microanalysis and electron scanning microscopy in the analysis of minerals and rocks. Systematic description of instrumental functions and beam-sample interactions. Correction procedures for quantitative X-ray analysis according to Bence-Albee-Ray method and ZAF theoretical approach. Three hours of lecture and one laboratory. Given in alternate years; not offered in 1978-79. Prerequisite : Geol $325,326,327$ and first year physics or consent of the instructor. Weill.
Geol 421. Engineering Geology. (G) 3 credit hours. The application of geology to engineering problems, especially those related to landslides, foundations, dams, and tunnels. Three lectures; field trips. Given in alternate years; not offered 1978-79. Prerequisite : Geol 325, 326, 327. Staff.
Geol 422. Petroleum Geology. (G) 3 credit hours. An introduction to the geology of petroleum deposits. Intended for geology majors but open to students in any field who have the necessary geology background. Topics covered include the importance of petroleum as an energy source ; occurrence, distribution, and reserves; chemical and physical properties of petroleum and the geologic framework of petroleum entrapment and accumulation ; origin and migration; exploration and drilling techniques; petroleum and global tectonics. Three lectures. Given in alternate years; not offered in 1978-79. Prerequisite: Geol 391, 382. Boggs.
Geol 423. Economic Mineral Deposits. (G) 3 credit hours. The general principles of the formation of metallic and nonmetallic economic mineral deposits; principal economic deposits, domestic and foreign. Two lectures; one laboratory. Prerequisite: Geol 325, 326, 327. Kays.

Geol 425, 426. Properties of Crystals. (G) 3 credit hours each term. Continuing beyond elementary mineralogy, applying modern theory to explain physical properties of minerals in order to apply them to problems in petrology, geochemistry, and geophysics. Geol 425 : packing and framework structures, crystal defects and dislocations, symmetry of points, lattices, space groups, and physical properties. Geol 426: general relations of
physical properties in crystals and in rock textures, electrical and magnetic properties, optical and dielectric properties, thermal properties, elasticity, deformation of crystals, crystal growth. Three lectures. Prerequisite : Geol 325, 326, 327, or one year of college chemistry. Given in alternate years; 426 offered in 1978-79. Holser.

## Geol 428. Materials and Processes of

 Ceramics. (g) 3 credit hours. Clays are studied as components of the geological landscape, the rock cycle, and geochemistry. Their composition and structure are explained as a basic for important properties: clay-water colloidal interactions in wetting and drying, firing reactions in the clay body, glass formation, crystal growth, thermal expansion and glaze fit. The course is designed for art majors without science background. Two lecture/ discussion meetings each week; two half-day field trips. Given in alternate years; not offered in 1978-79. Holser.Geol 431, 432. Paleontology. (G) 3 credit hours each term. Geol 431 : biostratigraphy, evolution, and paleoecology of invertebrates; systematic consideration of invertebrates with emphasis on groups abundant in the Paleozoic. Geol 432 : systematic consideration of invertebrates with emphasis on groups abundant in the Mesozoic and Cenozoic. Two lectures, one laboratory. Prerequisite: Geol 103 or Geol 203. Orr, Savage.

Geol 451. Pacific Coast Geology. (G) 3 credit hours. The general geology of the west coast of the United States and Canada from Alaska to southern California; special problems of the region. Two lectures, and two field trips (for which there is a transportation charge). Prerequisite : Geol 392 ; senior or graduate standing. Given in alternate years; offered in 1978-79. Baldwin.
Geol 461. Thermodynamic Geochemistry.
(G) 3 credit hours. An introduction to the basic concepts of thermodynamics as applied in mineralogy, petrology, and geochemistry.
Recommended for students wanting an introduction to classical chemical thermodynamics and wanting to become familiar with its geological applications. Gibbs free energy and its temperature, pressure and composition derivatives; fugacity; activity; chemical potential ; solutions, ideal and nonideal; phase equilibria under the physicochemical conditions in the Earth ; thermodynamic basis for phase equilibrium diagrams. Prerequisite : Geol 325, one year of college chemistry, elementary calculus, or consent of the instructor. Rice.
Geol 462. Tectonics. (G) 3 credit hours. Large-scale processes of orogeny, sea-floor spreading and plate tectonics with emphasis on current research. Three lectures. Given in alternate years; offered in 1978-79. Prerequisite : Geol 391, 392, or consent of instructor. Baker.
Geol 463. General Geophysics and Planetology. (G) 3 credit hours. Physics of the Earth: origin and composition of the Earth, elasticity and seismic waves, gravity and isostasy, body-wave seismology, surface waves, lateral variations in the crust and mantle, geomagnetism, heat flow, plate tectonics and convection. Given in alternate years; offered in 1978-79. Prerequisite: one year of calculus and physics, or consent of instructor. Waff.
Geol 464. Exploration Geophysics. (G) 4 credit hours. Theory and application of geophysical methods used in geologic mapping and resource exploration. Gravity and magnetic suryeys and their interpretation; exploration seismology; electrical and electromagnetic methods; radioactivity surveys;
remote sensing. Lectures and laboratory or field exercises. Given in alternate years; not offered 1978-79. Prerequisite : one year of calculus and physics; Geol 391, Geol 463, or consent of instructor. Waff.
Geol 470. Geochemistry. (G) 3 credit hours. Introduction to the application of chemical principles to geologic processes. Distribution of the elements in the earth and the processes. Distribution of the elements in the earth and the processes by which these distribution patterns evolve. Three lectures. Given in alternate years ; offered in 1978-79. Prerequisite : Geol $325,326,327$; or Ch 441, 442, 443 ; or consent of instructor. Goles.
Geol 473. Photogeology. (G) 3 credit hours. Geologic interpretation of air photographs, including simple photogrammetry, methods of photogeologic mapping, use of stereometers, introduction to remote sensing. Laboratory exercises in a variety of problems of photogeological interpretation. Lectures and laboratories. Given in alternate years; not offered in 1978-79. Prerequisite : Geol 201, 202, or 101, 102; Geol 391, 392. Baker.

## Graduate Courses

Geol 501. Research. Credit hours to be arranged. A no-grade course.
Geol 503. Thesis. Credit hours to be arranged. A no-grade course.
Geol 505. Reading and Conference. Credit hours to be arranged. A no-grade course. Geol 506. Field Studies. Credit hours to be arranged. Geologic field work principally in connection with graduate theses. Emphasis on individual problems. Prerequisite : graduate standing, consent of thesis adviser. A no-grade course.
Geol 507. Seminar. Credit hours to be arranged.
Geol 510. Experimental Course. Credit hours to be arranged.
Geol 511. Advanced Microscopy and Instrumentation. 4 credit hours. Methods of studying rocks and minerals by conventional laboratory techniques. Emphasis placed on optical and X-ray methods. During the course, students carry out a detailed study of all the mineral phases in a course-grained igneous rock and evaluate the relative merits of different techniques. Offered in alternate years; not offered in 1978-79. Prerequisite: Geol 414, 415, 416. McBirney.

## Geol 514. Advanced Metamorphic

Petrology. 4 credit hours. The origin and genetic relations of metamorphic rocks emphasizing especially factors and processes involved in metamorphic recrystallization, and study of well-defined equilibria for a range of metamorphic conditions ; microscopic examination of rock suites selected for study of petrologic principles and problems. Two lectures; two laboratories. Given in alternate years; offered in 1978-79. Prerequisite: Geol 415. Kays.

Geol 515. Advanced Igneous Petrology I. 3 credit hours. Igneous rocks of differentiated basic intrusions and the oceans. Course content varies each year according to current research interests. Selected rock suites are examined microscopically. Lectures and laboratories. Given in alternate years; not offered in 1978-79. Prerequisite: Geol 414, 461 or equivalent. McBirney.
Geol 516. Advanced Igneous Petrology II. 3 credit hours. Orogenic igneous rocks, including calc-alkaline series, granites, and rocks of the stable continental interior. Course content varies each year according to current
research interests. Selected rock suites are examined microscopically. Two lectures and one laboratory each week. Given in alternate years; not offered in 1978-79. Prerequisite: Geol 414, 461 or equivalent. McBirney.
Geol 520. Advanced Economic Geology. 3 credit hours. Theories of the origin of mineral deposits; study of examples illustrating general principles. Student reports on selected types of deposits. Review of current literature. Prerequisite: Geol 423. Given in alternate years; offered in 1978-79.
Geol 523. Petrology of Detrital Rocks. 3 credit hours. Examination and interpretation of detrital sedimentary rocks, with emphasis on sandstones. Lectures deal with the processes that control the composition, texture, and structure of detrital rocks and include aspects of provenance, transportation, deposition and diagenesis. Laboratory work emphasizes use of the petrographic microscope and techniques for textural analysis. Two lectures and one laboratory each week. Given alternate years; offered in 1978-79. Prerequisite : Geol 392, 416, one term of statistics or consent of instructor. Boggs.
Geol 524. Petrology of Carbonate Rocks. 3 credit hours. Study of the origin, composition, texture, and diagenesis of carbonate sedimentary rocks. Lectures emphasize the processes that control deposition and diagenetic alteration of limestones and include discussion of carbonate geochemistry. Laboratory work emphasizes petrographic microscope examination of mineral composition and texture of limestones and dolomites and interpretation of these rock properties. Two lectures and one laboratory period each week. Given in alternate years; not offered in 1978-79. Prerequisite : Geol 392, 416. Boggs.
Geol 525. Stratigraphy of North America. 3 credit hours. Stratigraphic framework of the United States and neighboring countries. Three lectures. Given in alternate years; offered in 1978-79. Prerequisite: Geol 392. Baldwin.
Geol 526. Global Stratigraphy. 3 credit hours. An examination of the major stratigraphic events of geologic history from the Precambrian to the Present. Possible relationships between orogenesis, continental drift, plate tectonics, geosyncline formation, marine transgression and regression, and climatic variation are discussed. The stratigraphic record in different parts of the world is examined in an attempt to form a global picture of these events. The major paleontologic changes are described and problems of evolutionary outbursts, extinction, faunal provinces, and migration are considered. Three lectures. Given in alternate years; offered in 1978-79.
Registration limited to seniors and graduate students. Savage.

## Geol 531, 532. Advanced Paleontology. 3

 credit hours each term. Applied problems in paleontology, principles of taxonomy. Problems and theory of biostratigraphy, manuscript preparation. Collection, preparation, and scientific illustration of fossil specimens. Survey of classical paleontological literature, readings on specific problems in paleontology, problems in ecology and paleoecology. Two lectures, one laboratory; field trips to collecting localities. Given in alternate years; Geol 531 offered in 1978-79. Prerequisite : Geol 431. Orr, Savage.Geol 533. Micropaleontology. 3 credit hour. Survey of all major plant and animal microfossil groups. Separation from matrices and preparation for microscopy. Fundamentals of microscopy. Microtechniques, biology and ecology of important microfossil groups.

Emphasis on biostratigraphy. Classification of parataxa, petroleum, and oceanographic micropaleontology. Literature survey, field trips to collect microfossils. One lecture, two laboratory periods. Given in alternate years; offered in 1978-79. Prerequisite : Geol 103, or 203. Orr.

## Geol 541. Archaeological Geology. 3 credit

 hours. Application of geology to the practices of archaeology. A review of the essential principles of mineralogy, petrology, and stratigraphy is followed by topical discussions of the various applications of geologic methods to achaeological investigation: petrologic examination of the materials of stone-tool industries, characterization and tracing of stone implements, geological stratigraphy, physical techniques of dating materials and deposits, alluvial deposits and stream terraces, interpretation of sediments, soils, stone resources, and environmental geology at archaeological sites. Intended for majors in archaeology. Lectures and laboratories. Given in alternate years; offered in 1978-79. Prerequisite : graduate standing and consent of instructor ; previous course work in a physical science recommended. Goles.Geol 561. Advanced Geochemistry I. 3 credit hours. Alternates between discussions of cosmochemistry (origin of elements and the solar system, geochemistry and origin of meteorites, lunar geochemistry, available information on geochemistry of planets other than Earth and Moon) and discussions of special topics closely related to the terrestrial research interests of the instructor (c.g., geochemistry of the Skaergaard Intrusion, or origins of rocks of intercontinental rift zones, or applications of trace element geochemistry to problems of igneous petrogenesis in a more general sense.) Given in alternate years ; offered in 1978-79. Prerequisite: Ch 442 or Geol 461 or consent of instructor. Goles.
Geol 562. Advanced Geochemistry II. 3 credit hours. Advanced topics in geochemistry and petrology: properties of silicate melts, thermodynamics of mixtures, excess functions, geothermometry, trace element distribution, petrogenetic modeling, diffusion. Given in alternate years; offered in 1978-79. Lectures. Prerequisite: Geol 414, 461 or consent of the instructor. Rice.
Geol 563. Advanced Geochemistry III. 3 credit hours. Advanced topics in low temperature and stable isotope geochemistry. The exogenic cycles of the elements; history of the ocean and atmosphere. Given in alternate years; offered in 1978-79. Three lectures. Prerequisite: Geol 461 or consent of instructor. Holser.
Geol 571, 572, 573. Geophysics. 3 credit hours each term. Selected topics in geophysics. Given in alternate years with subject matter to be selected by the instructor (previous topics have included seismology and dynamics of the upper mantle) ; Geol 571 offered in 1978-79. Lectures. Prerequisite : consent of instructor. Waff.
Geol 591. Advanced Structural Geology. 3 credit hours. Selected topics in Structural Geology and Tectonics : theory of fracture; emplacement of magma; structure and origin of the Basin and Range; principles of structural analysis ; inter-relation of structure and movement pattern. Lectures. Given in alternate years; offered in 1978-79. Prerequisite : Geol 391. Baker.
Geol 592. Volcanology. 2 credit hours. The products and processes of volcanism, origin of magmas, eruptive mechanisms, and relation of volcanism to orogeny and tectonic processes. Two lectures. Given in alternate years ; not offered in 1978-79. McBirney.

## Courses Offered Only in Summer Session

Geol 406. Field Geology. 9 credit hours.
Geological field work in selected parts of Oregon, emphasizing mapping at several scales in sedimentary, igneous, and metamorphic terrains. Projects include topographic and airphoto bases, and plane-table-alidade. Meets in the field for six weeks immediately after spring term. Prerequisite : Geol 201, 202, 203 or 101 through $106 ; 325,326,392$, or consent of instructor. Rohr.
Geol 408. Workshop. (g) Credit hours to be arranged.
Geol 455. Studies in Physical Geology. (g) 3 credit hours. Topics include earth materials, geologic processes, and landform development. Classwork is supplemented with field trips. The course is not meant to satisfy course requirements in graduate degrees in science. Prerequisite : upper-division standing. Not offered in 1978. Staff.
Geol 456. Regional Geology of North America. (g) 3 credit hours. A regional approach to the study of North American geology, rock units, structures, landforms, and geologic history. Field trips supplement classroom work. Survey course not meant to satisfy course requirements in graduate degrees in science ; prerequisite : upper-
division standing. Field trips on weekends; choice of several. Not offered in 1978. Baldwin.

## Center for Volcanology

Brian H. Baker, Ph.D., Associate Professor of Geology. Gordon G. Goles, Plı.D., Professor of Chemistry and Geology.
Alexander R. McBirney, Pl.D., Professor of Geology.
The Center for Volcanology is organized within the Department of Geology to provide a focus for a major intensive research program on the chemistry, physics, petrology, and geological relations of volcanoes and volcanic rocks. The program includes theoretical studies, experimental laboratory investigations, field mapping, and geophysical surveys. Graduate students in geology, chemistry, and physics take part in the research of the Center.


## German and Russian

## Faculty

Wolfgang A. Leppmann, Ph.D. Department Head, Professor of German (Goethe and 18th-century literature). B.A., 1948, M.A., 1949, McGill ; Ph.D., Princeton, 1952.
Karen R. Achberger, Ph.D., Assistant Professor of German (culture and civilization, German language instruction). B.S., 1967, M.A., 1968, Ph.D., 1975, W isconsin
John Fred Beebe, Ph.D., Associate
Professor of Russian (literature, linguistics). B.A., Wabash, 1946 ; M.A., Indiana, 1954 ; Ph.D., Harvard, 1958.

Edw'ard Diller, D.M.L., Professor of German (20th-century literature). B.A., California, Los Angeles, 1953 ; M.A., Los Angeles State, 1954 ; D.M.L., Middlebury, 1961.

Peter B. Gontrum, Ph.D., Professor of German (20th-century literature, poetry). A.B., Haverford, 1954 ; M.A., Princeton, 1956; Ph.D., Munich, 1958.
Walther L. Hahn, Ph.D., Professor of German (romanticism, 19th century novel and Novelle). Dip., Teachers College, Berlin, 1949 ; M.A., Rice, 1954 ; Ph.D., Texas, 1956.
Albert Leong, Ph.D., Associate Professor of Slavic Languages (19th- and 20th-century literature). B.A., 1961, M.A., 1966, Ph.D., 1970, Chicago. Beth E. Mavecty, Ph.D., Assistant Professor (teacher training and German literature). B.A., 1937, M.A., 1966, San Jose State ; Ph.D., Oregon, 1969.
James R. McWilliams, Ph.D., Associate Professor of German (19th- and 20thcentury literature). B.A., 1951, M.A., 1957, Ph.D., 1963, California.
Roger A. Nicholls, Ph.D., Professor of German (drama; 19th-century literature). B.A., Oxford, 1949 ; Ph.D., California, 1953.
Tanya Page, Ph.D., Assistant Professor of Russian (Old Russian, 18thand 19th-century literature). B.A., Hunter, 1964 ; M.A., 1967, Pl.D., 1973, Columbia.
Helmut R. Plant, Ph.D., Associate Professor of German (Germanic linguistics, paleography). B.A., Fairmont, 1957 ; M.A., 1961, Ph.D., 1964, Cincinnati.
James L. Rice, Ph.D., Associate Professor of Russian (folklore, 18th- and 19thcentury literature). A.B., Harvard, 1960 ; M.A., 1964, Ph.D., 1965, Chicago.

Ingrid A. Weatherhead, M.A., Instructor in Scandinavian (Norwegian). B.A., 1950, M.A., 1951, Puget Sound.

Jean M. Woods, Pl.D., Assistant Professor of German (16th-century, baroque, and 18th-century literature). B.A., Wellesley, 1948 ; M.A., 1965, Ph.D., 1968, Oregon.
Fruim Yurevich, M.A., Instructor of Russian (language, literature, culture). Diploma (M.A. equivalent) Astrakhan State Pedlagogical Institute, 1959; M.A., Oregon, 1976.

Virpi Zuck, Ph.D., Assistant Professor (Scandinavian literature). B.A., 1964, M.A., 1965, University of Helsinki ; Ph.D., 1977, Wisconsin.

## Faculty Emeriti

Edmund P. Kremer, J.U.D., Professor Emeritus of German. J.U.D., Frankfort on Main, 1924 ; at Oregon since 1928.
Astrid M. Williams, Ph.D., Professor Emerita of German. B.S., 1921, M.A., 1932, Oregon ; Ph.D., Marburg, 1934 ; at Oregon since 1935.

## Undergraduate Studies

The Department of German and Russian offers three programs leading to the B.A. degree in German. All three programs require 45 credit hours (as listed below) in addition to proficiency in the German language : normally demonstrated by satisfactory completion of at least third term of SecondYear German (GL 103 or GL 112).

## Program I: German Language and Literature

Requirements:
(1) GL 324, 325, 326. Introduction to German Literature. 3 credit hours each term.
(2) 18 hours of upper-division literature courses, excluding literature in translation.
(3) 18 hours of upper-division German language courses.

## Program II: German Area Studies

Requirements:
(1) GL 240. Contemporary Germany. 3 credit hours.
(2) GL 340, 341. German Culture and Civilization. 3 credit hours each term.
(3) GL 323. Spoken German. 3 credit hours.
(4) GL 437. Advanced Speaking Practice in German. (G) 3 credit hours.
(5) 12 hours of upper-division German language courses.
(6) 9 hours of upper-division German literature courses.
(7) 9 hours chosen from appropriate courses in other departments.
Examples of such courses include : Hst 432. German Reformation.
Hst 436 and 437. History of Germany.
Hst 438. 20th Century Germany.
Hst 440. Nietzsche to Freud.
Phl 429 and 430. Kant.
Phl 423. Leibniz.
Mus 451. Music of Bach to Handel.
Mus 452. The Classic Symphony
(Haydn, Mozart, Beethoven).
PS 336. Political Systems of Postwar Germany.
Other appropriate courses may be used to fulfill this requirement, subject to the approval of the undergraduate adviser.

## Program III: German and

## Scandinavian

Requirements :
(1) 27 hours of one Scandinavian language.
(2) 6 hours of a second Scandinavian language.
(3) 12 hours of upper-division German language or literature courses.

The Department of German and Russian has no particular requirements for high school students beginning the language but urges them to acquire a strong background in English grammar.

Except in very unusual cases, the department will not accept a grade of $D$ in any course counted towards fulfilling requirements for a major in German or German/Scandinavian or Russian.

The department encourages students in German to spend a year at the German Study Center in Stuttgart, operated by the Oregon State System of Higher Education. For further information, students should consult the departmental representative.

German students are invited to apply for accommodation in a residential "German House" which offers room and board at regular dormitory rates. Application should be made through the Department.

Undergraduate students preparing for graduate work in German are advised to begin a second foreign language, and to take related courses in either English or other European literature or both, or philosophy or history.

To gain a Bachelor of Arts with Honors, a student must maintain a 3.5 grade point average and write an honors essay or thesis approved by the department honors committee, for three credit hours.

Undergraduate majors planning to teach English in Germany are advised
to take Applied German Phonetics (GL 498) and English grammar courses.

Requirements for Baccalaureate Degree in Russian. Candidates for the Bachelor of Arts degree in Russian are required to take 48 credit hours of work beyond the second-year sequence (SL 101, 102, 103 or its equivalent). This work normally includes the following sequences : Third-Year Russian (SL 316, 317, 318 ) ; Introduction to Russian Literature (SL 313, 314, 315) ; History of Russia (Hst 447, 448, 449) or Russian Culture and Civilization (SL $340,341,342$ ). In addition, 15 credit hours or more are taken from the following electives in Russian literature and linguistics : Modern Russian Novel (SL 420) ; Modern Russian Short Story (SL 421) ; Modern Russian Poetry (SL 422) ; Modern Russian Drama (SL 423) ; Dostoevsky (SL 424) ; Tolstoy (SL 425) ; Gogol (SL 426) ; Turgenev (SL 427) ; Chekhov (SL 428) ; Soviet Russian Literature (SL 429) ; Seminar (SL 407) ; Fourth-Year Russian (SL 416, 417, 418) ; Structure of Russian (SL 440, 441, 442).

Students preparing for graduate work in Russian are advised to take either French or German, and to complete a balanced program of related courses in literature, history, philosophy, political science, art, and music.

To gain a Bachelor of Arts with Honors, a student must maintain a 3.5 grade point average and write an honors essay or thesis approved by the department honors committee, for three credit hours.
Secondary School Teaching of Foreign Languages. For certification as a teacher of German or Russian in Oregon high schools, the Oregon Teacher Standards and Practices Commission requires (1) the completion of 45 credit hours of subject preparation;
(2) the completion of Human Development and Learning (EPsy 326 or equivalent) ; Special Secondary Methods (CI 408) ; Seminar in Applied Linguistics (GL 407 or SL 407) ; Student Teaching: Junior High School (CI 416) or Student Teaching: Senior High School (CI 417) ; and (3) the recommendation of the institution at which the student completes the subject preparation.

The Department of German and Russian will approve for student teaching only those students whose course work in the language they plan to teach is of high quality, and who have attained reasonable oral and written control of that language.

For permanent certification, after a
fifth year of preparation, students must complete an additional 15 credit hours in linguistics, culture and civilization, and phonetics. The following courses are recommended. German: German Culture and Civilization (GL 340, 341. Applied German Phonetics (GL 498) ; Russian: Russian Culture and Civilization (SL 340, 341, 342) ; Russian Phonetics (SL 342), Structure of Russian (SL 440, 441, 442) ; both languages: Introduction to Lingustics (Ling 290), Phonology and Morphology (Ling 450), and Syntax and Semantics (Ling 451, 452) in that order.

It is recommended that, if possible, students complete the five-year program for permanent certification before they begin teaching, and that, during the fifth year, they satisfy the requirements for the interdisciplinary master degree in teaching.

For further information, the student should consult a member of the departmental committee on teacher training.

## Graduate Studies

The department offers programs leading to the degrees of Master of Arts and Doctor of Philosophy in German, and Master of Arts in Russian. For the master's degree in German, work in German literature is offered, which may be supplemented by courses in Germanic philology (Middle High German, history of the German language, and others). The doctoral program may be centered on literature or on philology as the student prefers, but not on one to the exclusion of the other. Potential candidates should consult Peter Gontrum for information about institutional and departmental requirements. Applicants are encouraged to provide GRE test scores.

In addition to the regular Master of Arts degree, the department offers a program in German and in Russian for a Master of Arts degree in teaching. It provides the secondary school teacher with an opportunity to study literature at the graduate level, to achieve competence in the written and spoken language, and to study and practice methods of presenting classroom material. The program in German offers the student the option of an eight-week summer course in Germany to be completed immediately after the ninemonth session at the University. Alternative courses will be available during the regular University summer session for students who cannot travel abroad. The program also fulfills the Oregon requirements for the standard secondary teaching certificate.

The Master of Arts program in Russian provides substantive training in Russian language, literature, and linguistics for students who wish to prepare for careers in teaching, research, translation, or government service. Creative imagination, a spirit of commitment to the Slavic field, and a knowledge of Russian sufficient for graduate work-usually three or more years of college work-are the principal prerequisites for admission. Candidates should acquire a reading knowledge of either French or German, preferably both, prior to admission or soon thereafter.

## German

The following open-ended courses are used in German language or literature courses, German Area Studies or Scandinavian language or literature courses.
GL 199. Special Studies. 1-3 credit hours. GL 200. SEARCH. 1-3 credit hours. GL 400. SEARCH. 1-3 credit hours.
GL 401. Research. Credit hours to be arranged.
GL 403. Thesis. Credit hours to be arranged. GL 405. Reading and Conference. Credit hours to be arranged.
GL 406. Special Problems. Credit hours to be arranged.
GL 409. Supervised Tutoring Practicum. 1-3 credit hours any term. A no-grade course.

## Upper-Division Courses Carrying Graduate Credit

GL 407. Seminar. (G) Credit hours to be arranged.
GL 408. Workshop. (G) Credit hours to be arranged.
GL 410. Experimental Course. (G) Credit hours to be arranged.

## Graduate Courses

GL 501. Research. Credit hours to be arranged.
GL 503. Thesis. Credit hours to be arranged. A no-grade course.
GL 505. Reading and Conference. Credit hours to be arranged.
GL 507. Seminar. Credit hours to be arranged. Kafka offered fall and winter terms.
GL 508. Workshop. Credit hours to be arranged.
GL 509. Supervised Tutoring Practicum. $1-3$ credit hours any term. A no-grade course.
GL 510. Experimental Course. Credit hours to be arranged.

## Undergraduate Language Courses

GL 50, 51, 52. First-Year German. 4 credit
hours each term. Designed to provide a thorough grammatical foundation and an elementary reading knowledge of German, as
well as an understanding of the spoken language. Woods, staff.
GL 53, 54. First-Year German. 6 credit hours each term, winter and spring. A twoterm sequence covering the work of GL 50,51 , 52. For students who wish to begin German in the winter term.
GL 55, 56, 57. First-Year German "GUTEN TAG': Speaking. 2 credit hours each term. Three-term sequence. Audiovisual first-year German course based on film series Guten Tag and incorporating the use of tapes, movies, slides, and small conversation groups. To complete the 4 -credit hour foreign language requirement for the $B$.A. degree, students may in addition take the two-hour first-year German Guten Tag: Reading course (GL 80, 81, 82 ), below. Students enrolled in FirstYear German (GL $50,51,52$ ) may take Guten Tag: Speaking (GL 55, 56, 57) to supplement their studies, but may not enroll in the Guten Tag: Reading section (GL 80, 81, 82) for credit. Achberger, staff.
GL 80, 81, 82. First-Year German "GUTEN TAG": Reading. 2 credit hours each term. Three-term sequence. Reading and grammar section to accompany first-year German Guten Tag: Speaking (GL 55, 56, 57) above. Students enrolled in GL 55 above may take this course to meet the 4-credit hour foreign language requirements for the B.A. degree. Not open for credit to students in First-Year German (GL 50, 51, 52). Achberger, staff.

## GL 101, 102, 103. Second-Year German.

 4 credit hours each term. Review of grammar and composition ; reading of selections from representative authors: conversation. Open to students who have completed GL 52 or GL 57 and GL 82, or the equivalentGL 110, 111, 112. Second-Year German "GUTEN TAG." $2-4$ credit hours each term. Three-term sequence. This course continues first-year German Guten Tag (both GL 57 and 82), but is open to all students who have taken first-year German (GL 52 or GL
54 ). The audiovisual part of this court may be taken separately for 2 hours of credit, and also by students enrolled in GL 101. Students wishing to meet the foreign language requirement for the B.A. degree must take a total of 4 hours of credit. Achberger, staff.
GL 229. Basic Writing in German. 3 credit hours. A systematic introduction to the writing of German prose focusing on simple grammatical structures and the orthography of German. First in a new vertical series of writing courses (the others: GL 329 and GL 429G). Prerequisite : placement by test.
GL 321, 322, 323. German for Reading Knowledge. 3 credit hours each term. Intensive practice in grammar, followed by the reading of texts in the student's major field. Intended principally for graduate students. Prerequisite : none.
GL 327. Translation: German-English. 3 credit hours. General principles of translating, with collateral exercises in class followed by translations of students' own texts. Prerequisite: GL 323 or two years of college German or the equivalent.
GL 328. Translation : English-German. 3 credit hours. General principles of translating, with collaterial exercises in class followed by translations of students' own texts. Prerequisite: GL 323 or two years of college German or the equivalent.
GL 329. Intermediate Composition in German. 3 credit hours. Use of more complex grammatical structures in writing; compound tenses, passive voice, subjunctive mood; more specialized vocabulary. Prerequisite: placement by writing test.

GL 334, 335, 336. German Composition and Conversation. 3 credit hours each term. Extensive practice in speaking and writing Conducted in German. Prerequisite : two years of college German.
GL 337. Intermediate Spoken German. 3 credit hours. Presentation of talks on both assigned and "free" topics. Practice in narration of slides and films, and of extemporaneous speaking. Prerequisite : two years of college German or equivalent.

## GL 339. Intensive German Grammar

Review. 3 credit hours. Intensive review of all grammatical structures of German. Copious exercises, supplemented by historical explanation. Prerequisite : two years of college German or equivalent.

## Upper-Division Courses Carrying Graduate Credit

GL 429. Advanced German Writing. (G) 3 credit hours. Writing of original compositions, with attention to idiomatic and figurative German usage and to special problems in German grammar. Introduction to stylistic analysis through close study of representative texts, their stylistic devices and typical vocabulary. Organization of ideas and information through precis-writing. Prerequisite : placement by writing test or consent of instructor.
GL 434. History of the German Language. (G) 3 credit hours. Introduction to modern German dialects. Grammar, orthography and vocabulary of High German from the twentieth to the ninth century, based on early newspapers, pamphlets, travelogues, nature treatises, and religious tracts. Readings in the seminal works of German linguistic science. Prerequisite: 3 years of college German or the equivalent, or consent of the instructor. Not offered 1978-79.
GL 437. Advanced Speaking Practice in German. (G) 3 credit hours. Practice in expressive reading, including effective delivery of papers prepared for other courses. Analyses of German radio broadcasts and other recorded materials. Ex tempore talks, one major oral presentation. Prerequisite: 3 years of college German or the equivalent, or consent of the instructor.
GL 498. Applied German Phonetics. (G) 3 credit hours. The articulatory basis of German pronunciation ; analytic comparison of the sounds of German and English ; diagnosis and remedy of common errors in American pronunciation of German. Required for teacher certification and for candidates for graduate degrees in German. Prerequisite : three years of college German, or consent of instructor. Plant

## Undergraduate Literature Courses

GL 250. Goethe and His Contemporaries in Translation. 3 credit hours. Readings in German literature in English. A sampling of works from the classical age of German literature including those from Lessing, Schiller, and Kleist as well as the chief works of Goethe. Prerequisite : none.
GL 251. Thomas Mann, Kafka, and Hesse in Translation. 3 credit hours. Representative readings of these three authors in English with the main emphasis on their shorter fiction. Prerequisite : none.

## GL 252. Brecht and Modern German

Drama in Translation. 3 credit hours. A study of representative works of Bertolt Brecht as well as the works of other important dramatists such as Dürrenmatt and Frisch in

English translation. No knowledge of German required. Prerequisite : none.
GL 255. Medieval German Literature in Translation. 3 credit hours. A study of the major German writers of the Middle Ages in English translation. The course will examine works by Wolfram von Eschenbach, Gottfried von Strassburg as well as the Song of the Nibelungs. Prerequisite: none. Not offered 1978-79.
GL 257. Contemporary German Fiction in Translation. 3 credit hours. A study of the most recent German fiction in translation. The novels and short prose of such authors as Grass, Böll, Handke, Lenz, Walser, and Johnson wil be discussed. Prerequisite : none. Not offered 1978-79.
GL 301, 302. Masterpieces of German Literature. 3 credit hours each term. A sampling of the major works of German literature designed to familiarize the student with the great authors in the German literary tradition. Emphasis will be placed on the literary exper ience and the appreciation of the works. Discussion in German. Prerequisite : 2nd year German or consent of instructor.
GL $324,325,326$. Introduction to German Literature. 3 credit hours each term. Introduction to basic critical concepts and methods of explication of German literary texts. Intensive practice in analysis of poetry, drama, and prose. Discussion in German. Recommended for majors. Prerequisite: 2nd year German or consent of instructor.

## Upper-Division Courses Carrying Graduate Credit

GL 411. Age of Classicism. (g) 3 credit hours. The role of Lessing, Herder, Winckelmaim in preparing the emergence of the main dramatic works as well as of lyric poetry by both Goethe and Schiller. Prerequisite GL 324, 325, 326 or consent of instructor.
GL 413. Goethe's Faust. (g) 3 credit hours. The historical and literary tradition of the Faust legend; the genesis and intensive study of the work with particular emphasis on Part I. Prerequisite : GL 324, 325, 326 or consent of Not offered in 1978-79.
GL 414. Beginning of the German Novelle.
(g) 3 credit hours. Goethe's contribution, Unterhaltungen deutscher Ausgewanderten, to the wide range of narrative possibilities as exemplified in Romantic Novellen and those by Kleist and his early successors. Prerequisite : GL 324, 325, 326 or consent of instructor Not offered 1978-79.

## GL 415. German Novellen: The Art of

Fiction. (g) 3 credit hours. Readings from Gotthelf to Fontane with particular emphasis on narrative structure and technique. Prerequisite: GL 324, 325, 326 or consent of instructor. Not offered 1978-79.
GL 416. 19th Century German Literature and Reality. (g) 3 credit hours. Selected readings from the wealth of Novellen displaying a reflection of and concern with contemporary conditions ; the concept and role of the Novellen writer as a critic of society. Prerequisite: GL 324, 325, 326 or consent of instructor.
GL 418. German Literature from the Middle Ages Through the Enlightenment. (g) 3 credit hours. Readings in German literature from the Medieval Period (modern translations of works from Old High and Middle High German), the Reformation, the Baroque, and the Enlightenment. Background reading of literary history. Prerequisite : GL $324,325,326$ or consent of instructor.

GL 431. Literature at the Turn of the Century. (g) 3 credit hours. Study of German prose, poetry and drama at the begirining of this century. Representative authors include Hauptmann, Hofmannsthal, and Schnitzler. Prerequisite : GL 324, 325, 326 or consent of instructor. Not offered in 1978-79.
GL 432. From Expressionism through Exile. (g) 3 credit hours. Selected readings from the works of Thomas Mann, Hesse, Rilke, Kafka and Brecht. Treatment of each author's position in German literature. Prerequisite: GL $324,325,326$ or consent of instructor.
GL 433. Literature after 1945. (g) 3 credit hours. Study of the dramas of Frisch and Dürrenmatt and contemporary fiction such as Böll and Grass. Attention given to literary directions since the end of World War II. Prerequisite: GL 324, 325, 326 or consent of instructor.
GL 450. Performance of German Drama. 3 credit hours. Performance of a play in German. Extensive practice in effective oral communication with emphasis on correct pronunciation. Prior to performance, reading of play and scene rehearsals in class. Public performance at end of term. Conducted in German. Prerequisite : two years of college German or consent of instructor.
GL 481. Major German Authors. (g) 3 credit hours. A study in depth of one of the major writers in German literary history. The course will focus on one of the following authors : Lessing, Heine, Hölderlin, Hauptmann, Rilke, Kafka, T. Mann, Hesse, Brecht, or Grass. Primarily for under graduates. Couirse may be repeated for credit with different content. Prerequisite : GL 324, 325, 326 or consent of instructor. Not offered in 1978-79.

## Graduate Courses

GL 512, 513. German Lyric of the 18 th and 19th Centuries. 4 credit hours each term. An examination of the poetry of Goethe, Schiller, Hölderlin; Mörike, Heine, and others. From the Sturm und Drang to the end of the 19th century. Normally each term would be devoted to a study in depth of two or three poets. Prerequisite : graduate standing or consent of the instructor. Gontrum. Not offered in 1978-79.
GL 515. Readings in Middle High German Literature. 4 credit hours each term. Study of an entire work, in facsimile edition where available. Reading of manuscript, and some manuscript copying. Texts will include the Nibelungenlied, Irvein, the Manesse Codex, and other works of Middle High German literature as they become available in facsimile editions. Prerequisite : consent of instructor. Plant.
GL 517, 518, 519. German Romanticism. 4 credit hours each term. Readings in the works of Tieck, F. Schlegel, Novalis, Hoffman, Mörike, and Eichendorff. The concept of romantic poetry and its underlying philosophical ideas. The romanticists' contributions to literary criticism. Hahn; 517 offered 1978-79.
GL 520. Research Methods in German. 3 credit hours fall term. Bibliography and methods of research in German language and literature as an introduction to graduate study. Woods. Not offered in 1978-79.
GL 524. German Literature of the Sixteenth Century. 4 credit hours. Humanism and the Reformation as reflected in German literature. The influence of Luther. Readings in works by Hans Sachs, Fischart, and Brant,
as well as typical Volksbuicher. Woods. Not offered in 1978-79.
GL 526. German Literature 1700-1750. 4 credit hours. The German Enlightenment and its relation to the Enlightenment in England and France. Readings from works by Gottsched, Klopstock, Wieland, and other typical figures of the period. Woods. Not offered in 1978-79.
GL 527, 528, 529. Goethe. 4 credit hours each term. Comprehensive examination of Goethe's works, including an intensive study of Foust, and Goethe's aesthetic and critical views. Leppman; 527 offered 1978-79.
GL 530, 531. Old High German. 4 credit hours each term. Nonhistorical description of the structure of Old High German ; emphasis on syntax. Some reading of manuscripts. Representative selections from Old High German literature. Plant. Not offered in 1978-79.
GL 532. Introduction to Gothic. 4 credit hours. Introduction to Gothic grammar and script. Selected readings in the Gothic Bible, comparison with West-Germanic translations of corresponding passages of the New Testament. Of interest to students in Old English and Old Norse. Plant.
GL 536. Lessing. 4 credit hours. Detailed study of Lessing's dramas, his theoretical and philosophical writings, and his contribution to German classicism. Nicholls. Not offered in 1978-79.
GL 537. Sturm und Drang. 4 credit hours. The dramatic works of the Storm and Stress writers, and their contribution to a new understanding of literature. Nicholls.
GL 538. Schiller. 4 credit hours. An intensive study of Schiller as a dramatist and poet, with particular consideration also of his important critical essays. Nicholls.
GL 539. Introduction to Old Saxon. 4 credit hours. Introduction to Old Saxon grammar, with emphasis on syntactic structures; some manuscript readings; critical translation of major portions of Heliand and Genesis. Recommended for students in Old English. Plant. Not offered in 1978-79.
GL 540, 541, 542. German Drama of the Nineteenth Century. 4 credit hours each term. Analysis of the dramas of Kleist, Bücher, Grabbe, Grillparzer, and Hebbel ; special emphasis on dramatic technique and on the individual contributions of these writers to the genre. Nicholls. Not offered in 1978-79.

## GL 543, 544, 545. Twentieth Century

 German Lyric. 4 credit hours each term. A study of the major poets of this century including Rilke, Trakl, and Benn as well as contemporary poets such as Enzensberger, Bachmann, and Celan. Prerequisite : graduate standing or consent of the instructor. Gontrum ; 543 offered 1978-79.GL 546, 547, 548. Modern German Novel. 4 credit hours each term. Detailed study of individual writers: Thomas Mann, Hesse, Kafka, Musil, Grass, Frisch, or others. Emphasis on the nature of the genre and its gradual transformation as well as on narrative style and technique. Gontrum, Diller, Leppmann, Nicholls. Not offered in 1978-79.
GL 550, 551, 552. Modern German Drama. 4 credit hours each term. Fall: Gerhart Hauptman, Arthur Schnitzler ; winter: Wedekind and the Expressionists; spring: Brecht, Dürrenmatt, Frisch. Intensive study of the dramatic works of these writers, particularly in terms of new dramatic techniques. Gontrum. Not offered in 1978-79.
GL 555, 556. German Novel of the Nineteenth Century. 4 credit hours each term.

Detailed study of the novels of Jean Paul, Mörike, Immermann, Stifter, Keller, Raabe and Fontane. Emphasis on the Bildungs or Ersichungsroman through treatment of narrative structure and technique. Hahn. Not offered in 1978-79.
GL 558. German Lyric of the Seventeenth Century. 4 credit hours. Poetry by Weckerlin, Opitz, Spee, Dach, Gryphius, and Hofmannswaldau. Poetic theory of Opitz, Harsdörffer, and other theoreticians of the period. Woods. Not offered in 1978-79. GL 559. German Drama and Prose of the Seventeenth Century. 4 credit hours.
Lramas by Gryphius, Lohenstein, and Reuter. The baroque novel and the work of Grimmelshausen. Woods. Not offered in 1978-79.

## GL 566. The Concept of the German

 Novelle. 4 credit hours. The literary historical background and development of the genre; the various theories of the Novelle from Schlegel to Musil; their critical assessment from Lukacs to Weinrich. Hahn. Not offered in 1978-79.
## German Area Studies

GL 240. Contemporary Germany. 3 credit hours. Survey of the cultural and historical heritage influencing contemporary life in the German-speaking countries of Central Europe, with emphasis on developments in the arts (especially painting, music, and architecture). Lecture format, including guest lecturers from other disciplines (e.g., History, Music, Film Studies, Political Science) and films. All lectures in English; no previous knowledge of German required. Achberger.
GL 340, 341. German Culture and Civilization. 3 credit hours each term. Introduction into the cultural, artistic, and intellectual developments in Germany since 1871. Focus on significant German contributions in art, music, architecture, literature, theater, and film against the background of historical and social developments. Films and slides supplement lectures in German. Prerequisite : two years of college German or consent of instructor. Achberger.

## GL 440. Topics in German Culture and

 Civilization. 3 credit hours. Political, social, economic and cultural aspects of the Federal Republic (FRG) and the German Democratic Republic (GDR). Students will write a term paper covering one of the topics dealt with in the lectures. Taught in German. Prerequisites: GL 340 and 341 or consent of instructor. Achberger. Not offered in 1978-79.
## Scandinavian

## Undergraduate Language Courses

GL 60, 61, 62. First-Year Norwegian. 3 credit hours each term. Designed to give a thorough grammatical foundation in idiomatic Norwegian, with emphasis on both the reading and the speaking of the language. Offered alternate years; not offered 1978-79.
Weatherhead.
GL 70, 71, 72. First-Year Swedish. 3 credit hours each term. Designed to give a thorough grammatical foundation in idiomatic Swedish, with emphasis on both the reading and the speaking of the language. Zuck.
GL 104, 105, 106. Second-Year Norwegian. 3 credit hours each term. Review of grammar, composition, conversation, current newspapers ; study of selections from representative authors. Weatherhead.

GL 107, 108, 109. Second-Year Swedish. 3 credit hours each term. Review of grammar, composition, conversation; reading of selections from contemporary fiction, essays, and newspapers. Offered in alternate years. Not offered 1978-79.
GL 357, 358, 359. Third-Year Swedish. 3 credit hours each term. Historical survey of the language ; intensive study of modern. idiomatic Swedish with extensive practice in oral communication and written composition. Conducted in Swedish. Prerequisite : two years of college Swedish or equivalent. Zuck.
GL 407. Seminar. Credit hours to be arranged.
Third-Year Norwegian. Not offered in 1978-79.

## Literature Courses

GL 351. Ibsen to Hamsun in Translation.
3 credit hours. Intensive study of a limited number of outstanding Danish and Norwegian authors in the context of Scandinavian intellectual history. Readings and lectures in English. Offered fall term. No prerequisites. Zuck.

## GL 352. August Strindberg to Ingmar

Bergman in Translation. 3 credit hours.
A century of Swedish literature and film in transition and in revolt. Readings and lectures in English. Offered winter term. No prerequisites. Zuck.
GL 353. Readings in Translation: Scandinavian Literature and Society. 3 credit hours. Close study of selected aspects of Scandinavian society, past and present, based on readings of major Scandinavian authors. Most recent topic: Image of Women in Scandinavian literature. Offered spring term. No prerequisites.

## Russian

## Undergraduate Courses

SL 50, 51, 52. First-Year Russian. 5 credit hours each term. Elementary Russian grammar, reading, conversation, and composition. Beebe, Leong, staff.
SL 101, 102, 103. Second-Year Russian. 5 credit hours each term. Intermediate Russian grammar, reading, conversation, and composition. Study of representative literary works. Beebe, Yurevich, staff.
SL 199. Special Studies. 1-3 credit hours.
SL 313, 314, 315. Introduction to Russian
Literature. 3 credit hours each term.
Russian literature from origins to 1917, with special emphasis on Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, Checkhov, and others. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Rice.
SL 316, 317, 318. Third-Year Russian. 5 credit hours each term. Intensive study in Russian of literary works by representative nineteenth-and twentieth-century writers, with extensive practice in speaking, writing, and comprehension. Prerequisite: : two years of college Russian or equivalent. Yurevich.
SL 324. Russian Phonetics. 3 credit hours. Scientific study of Russian sounds, rhythms, and intonation, with supervised individual practice. Beebe.

## SL 340, 341, 342. Russian Culture and

 Civilization. 3 credit hours each term. The comparative aesthetics and development of art, film, music, and literature within the context of Russian intellectual history. Recent topics : Emigré Russian Culture;Nabokov; Human Rights Movement in USSR ; The 1920s. Leong.
SL 403. Thesis. Credit hours to be arranged. SL 405. Reading and Conference. Credit hours to be arranged.
SL 409. Supervised Tutoring Practicum. 1-3 credit hours any term. A no-grade course.

## Upper-Division Courses <br> Carrying Graduate Credit

Note : Not all of these courses are offered every year.
SL 407. Seminar. (G) Credit hours to be arranged.
Aleksandr Pushkin offered fall term 1978. Brothers Karamazov offered winter term 1979. Lev Shestos offered spring 1979.
Terz-Siniavskii offered winter term 1979.
SL 416, 417, 418. Fourth-Year Russian. (G) 5 credit hours each term. Stylistic analysis of advanced Russian literary texts with extensive practice in conversation, composition, and comprehension. Prerequisite :
SL 316, 317, 318 or equivalent. Yurevich, Page.
SL 420. Modern Russian Novel. (G) 3 credit hours. Development of modern Russian novel, with emphasis on minor prose masters. Readings in English; Russian majors do selected readings in the original. Leong, Rice.
SL 421. Modern Russian Short Story. (G) 3 credit hours. Development of Russian short story. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Page, Rice.
SL 422. Modern Russian Poetry. (G) 3 credit hours. Detailed study of Russian symbolism, acmeism, futurism, and contemporary poetry. All readings and lectures in Russian. Leong, Rice, Beebe, Yurevich.
SL 423. Modern Russian Drama. (G) 3
credit hours. Evolution of Russian drama. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Page, Rice.
SL 424. Dostoevsky. (G) 3 credit hours. Dostoevsky's intellectual and artistic development ; context and structure of The House of the Dead, Notes From the Underground. Crine and Punishment, The Idiot, The Brothers Karamazov, and other works. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Rice.
SL 425. Tolstoy. (G) 3 credit hours. Development and context of Tolstoy's art ; analysis of War and Peace, Anna Karenina, representative short novels, stories, plays, and essays. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Page.
SL 426. Gogol. (G) 3 credit hours. Comprehensive study of Gogol's works ; critical analysis of Evenings on a Farm near Dikanka, Mirgorod, Petersburg tales, The Inspector General and other plays, Dead Souls. Readings in English ; Russian majors do selected readings in the original. Beebe, Page, Rice. SL 427. Turgenev. (G) 3 credit hours. Literary development and context of Turgenev's art; analysis of novels Rudin, A Nest of Gentlefolk, On the Eve, Fathers and Sons, Smoke, Virgin Soil, stories, plays, and critical essays. Readings in English ; Russian majors do selected readings in the original. Rice.
SL 428. Chekhov. (G) 3 credit hours. Critical study of Chekhov's art; structure, style, and development of representative prose fiction and plays, including The Seagull, Uncle Vanya, Three Sisters, The Cherry Orchard.

Readings in English ; Russian majors do selected reading in the original. Page, Leong, Rice.
SL 429. Soviet Russian Literature. (G) 3 credit hours. Major developments in Russian "literature since 1917 ; theory and practice of "socialist realism"; critical analysis of representative works by Gorky, Sholokhov, Pasternak, Babel, Olesha, Mayakovsky, Bulgakov, Zoshchenko, Solzhenitsyn, and others. Readings in English ; Russian majors do selected readings in the original. Leong, Yurevich.
SL 440, 441, 442. Structure of Russian. (G) 3 credit hours each term. Phonetics, grammatical and syntactical patterns of standard contemporary Russian. Beebe.

## Graduate Courses

SL 503. Thesis. Credit hours to be arranged. A no-grade course.
SL 505. Reading and Conference. Credit hours to be arranged.
SL 507. Seminar. Credit hours to be arranged.
Russian Literary Criticism.
SL 509. Supervised Tutoring Practicum. $1-3$ credit hours any term. A no-grade course.
SL 520. Research Methods in Russian. 5 credit hours. Bibliography and research methods in the graduate study of Russian literature. Leong, Rice.
SL 521. Old Russian Literature. 5 credit hours. An introductory discussion of the system of literary genres in Kievan Rus', with attention to the subsequent development of that system, its bonds with oral poetry and other aesthetic forms, and its significance for modern Russian civilization. Conducted in English with selected close readings in Old Russian. Offered alternate years. Page, Rice.
SL 522. Russian Folklore. 5 credit hours. An introductory discussion of Russian folklore, primarily verbal art, in its social and aesthetic functions, with special attention to the paradigmatic eighteenth century collection attributed to Kirsha Danilov and to various literary adaptations of folklore forms. Conducted in English with readings in
Russian. Offered alternate years. Rice.
SL 523. Eighteenth-Century Russian Literature. 5 credit hours. An introductory discussion of the refashioning of Russian poetic imagination in response to the simultaneous discoveries of classical antiquity, the Renaissance, French neoclassicism, the Enlightenment, Russian history, and new aesthetic values in the Russian vernacular and oral poetry. Conducted in English with selected close readings in Russian. Offered alternate years. Page, Rice.
SL 524. Pushkin. 5 credit hours. Detailed study of Pushkin's narrative and lyric poetry, dramas, prose fiction, folk stylizations, and Evgenij Onegin, with special attention to his poetics and its influence on the subsequent development of Russian literature. Conducted in Russian. Offered alternate years. Leong, Page.
SL 540. Old Church Slavonic. 3 credit hours. History and grammar of Old Church Slavonic ; sound system, morphology, and elements of syntax. Reading of texts. Beebe. SL 541, 542. History of Russian. 3 credit hours each term. Survey of East Slavic phonology and morphology from Common Slavic to the present. Dialectal divergence in Old Russian and the modern literary languages. Dialects of East Slavic. Reading of OIld and Middle Russian texts. Beebe.

Slavic
Upper-Division Courses
Carrying Graduate Credit
SL 480, 481, 482. First-Year Serbo-
Croatian. (G) 4 credit hours each term.
Elementary Serbo-Croatian grammar, conversation, reading, and composition. Prerequisite : two years of Russian or equivalent. SL 483, 484, 485. First-Year Polish. (G) 4 credit hours each term. Elementary Polish grammar, conversation, reading, and composition. Prerequisite : two years of Russian or equivalent.
SL 486, 487, 488. First-Year Czech. (G) 4 credit hours each term. Czech grammar, reading, and composition. Prerequisite : two years of Russian, or equivalent.
SL 490, 491, 492. First-Year Ukrainian. (G) 4 credit hours each term. Elementary Ukrainian grammar, reading, and composition. Prerequisite : two years of Russian, or equivalent.


## History

## Faculty

Robert G. Lang, Ph.D., Department Head, Associate Professor of History
(Tudor and Stuart England). A.B., Columbia, 1955 ; D.Phil., Oxford, 1963. Gustave Alef, Ph.D., Professor of History (medieval Russia). B.A., 1949, M.A., 1950, Rutgers ; M.A., 1952, Ph.D., 1956, Princeton.
Robert M. Berdahl, Ph.D., Associate Professor of History (Germany). B.A., Augustana, 1959; M.A., Illinois, 1961 ; Ph.D., Minnesota, 1965.
Edwin R. Bingham, Ph.D., Professor of History (cultural American historyPacific Northwest). B.A., 1941, M.A., 1942, Occidental ; Ph.D., California at Los Angeles, 1951.
Raymond Birn, Ph.D., Professor of History (Europe, 1600-1815). A.B., New York University, 1956; M.A., 1957, Ph.D., 1961, Illinois.
William B. Boyd, Ph.D., Professor of History (modern Europe). President, University of Oregon. B.A., Presbyterian, 1946 ; M.A., Emory, 1947 ; Ph.D., Pennsylvania, 1954.
Thomas A. Brady, Ph.D., Associate Professor of History (renaissance and reformation). B.A., Notre Dame, 1959; M.A., Columbia, 1963 ; Ph.D., Chicago, 1968.

Richard Maxwell Brown, Ph.D., Beekman Professor of Northwest and Pacific History (American West). B.A.
Reed, 1952 ; A.M., 1955, Ph.D., 1959, Harvard.

Roger P. Chickering, Ph.D., Associate Professor of History (Germany-20th century). B.A., Cornell, 1964 ; M.A., 1965, Ph.D., 1968, Stanford.

Joseph W. Esherick, Ph.D., Associate Professor of History (China). B.A., Harvard, 1964 ; M.A., 1966, Ph.D., 1971, California, Berkeley.
Mark Falcoff, Ph.D., Associate Professor of History (Spain, Latin America). B.A., Missouri, 1963 ; M.A., 1969, Ph.D., 1970, Princeton.
G. Ralph Falconeri, Ph.D., Associate Professor of History (Japan and modern China). B.A., Nevada, 1949 ; M.A., 1958, Ph.D., 1967, Michigan.

William S. Hanna, Ph.D., Associate Professor of History (colonial America). A.B., 1949, M.A., 1954, Ph.D., 1959, California, Berkeley. (On sabbatical leave, winter 1979.)
Paul S. Holbo, Ph.D., Professor of History (American foreign relations) B.A., Yale, 1951 ; M.A., 1955, Ph.D., 1961, Chicago.
R. Alan Kimball, Ph.D., Associate Professor of History (modern Russia). B.A., Kansas, 1961 ; M.A., 1963, Ph.D., 1967, Washington.
Jerzy Linderski, Ph.D., Professor of History (ancient history). M.A., 1955, Ph.D., 1960, Crakow. (On sabbatical leave, fall 1978.)
Jack P. Maddex, Ph.D., Associate Professor of History (Civil War). B.A., Princeton, 1963 ; Ph.D., North Carolina, 1966.
Mavis Howe Mate, Ph.D., Associate Professor of History (medieval, women's history). B.A., 1956, M.A., 1961, Oxford; Ph.D., 1967, Ohio State. Kate Wildman Nakai, Ph.D., Assistant Professor of History (premodern China and Japan). B.A., 1963, M.A., 1964, Stanford ; Ph.D., Harvard, 1972. Stanley A. Pierson, Ph.D., Professor of History (cultural and intellectual European). B.A., Oregon, 1950 ; A.M., 1951, Ph.D., 1957, Harvard.
Daniel A. Pope, Ph.D., Assistant Professor of History (American economic history). B.A., Swarthmore, 1966; M.A., 1968 ; Ph.D., 1973, Columbia. George J. Sheridan, Jr., Ph.D., Assistant Professor of History (France, European social-economic). B.A., Princeton, 1969 ; M.A., 1974, Ph.D., 1978, Yale.
Robert W. Smith, Ph.D., Professor of History (modern Britain). B.A., Chicago, 1937 ; M.A., 1940, Ph.D., 1942, California, Los Angeles.
Lloyd Sorenson, Ph.D., Professor of History (history of civilization). B.A., North Dakota, 1938 ; M.A., 1945, Ph.D., 1947, Illinois. William Toll, Ph.D., Assistant Professor of History (Afro-America, U.S. ethnic). B.A., Pennsylvania, 1963 ; M.A., 1963, Ph.D., 1972, California, Berkeley.
Louise Carroll Wade, Ph.D., Associate Professor of History (U.S. social, urban, and labor history). B.A., Wellesley, 1948 ; Ph.D., Rochester, 1954.

## Faculty Emeriti

Leslie Decker, Ph.D., Professor Emeritus of History. B.A., Maine, 1951 ; M.A., Oklahoma State, 1952 ; Ph.D., Cornell, 1961 ; at Oregon since 1969.

Paul S. Dull, Ph.D., Professor Emeritus of History. B.A., 1935, Ph.D., 1940, Washington ; at Oregon since 1946.
Thomas P. Govan, Ph.D., Professor Emeritus of History. B.S., Georgia Institute of Technology, 1928; M.A., Emory, 1934 ; Ph.D., Vanderbilt, 1937 ; at Oregon since 1967.

Val R. Lorzerin, Ph.D., Professor Emeritus of History. B.A., Cornell, 1927 ; M.A., Ohio State, 1929 ; Ph.D., Cornell, 1953 ; at Oregon since 1957.
Earl Pomeroy, Ph.D., Beekman Professor Emeritus of Northwest and Pacific History. B.A., San Jose State, 1936; M.A., 1937, Ph.D., 1940, California ; at Oregon since 1949.
Kenneth W. Porter, Ph.D., Professor Emeritus of History. B.A., Sterling, 1926; M.A., Minnesota, 1927 ; Ph.D., Harvard, 1936; at Oregon since 1958.

## Undergraduate Studies

The study of history offers both a framework for a liberal education and a broad foundation for a variety of careers-teaching and research, law, journalism, foreign service, government, business, the ministry, librarianship. It provides a context of historical knowledge essential for an understanding of the contemporary world. Through analyzing interpretative studies and accounts by witnesses to historical events, students appreciate more fully the complexity of human experience. By examining social changes in other times, they develop a broad perspective and the ability to weigh evidence and argument that free people need in a rapidly changing world.

The Department of History offers programs sufficiently structured to guide the student, yet flexible enough to encourage the development of individual interests. The department strongly urges upon history students the importance of mastering foreign languages in order to use foreign languages in their studies, read more widely, and meet entrance requirements for graduate schools. Upon deciding to major in history, students must get approval of their program from department advisers, who are available for periodic review. They may choose one of the three options presented below.

History courses that satisfy department major requirements must be taken on a graded basis.
Option One: The General Major in History. This option is recommended for students who want a balanced program of historical study ; it combines a wide range of courses with specialized inquiry by means of departmental seminars and colloquia. The department strongly recommends satisfying University requirements for the Bachelor of Arts degree. Specific requirements follow:
(1) Satisfaction of the University requirements for the Bachelor of Arts or the Bachelor of Science degree.
(2) Forty-five credit hours in history courses, of which 27 must be upperdivision. Students declaring a History major after September 1978 must take at least 18 credit hours in history courses numbered 400 to 499 . Students declaring a History major prior to September 1978 must take at least 12 credit hours in history courses numbered 400 to 499 . Majors are required to complete 6 credit hours of work in European history before 1800 .
(3) Six hours of upper-division credit in each of three fields selected from the following: (a) European history before 1600; (b) European history after 1600 ; (c) United States history; (d) one of the following: East Asian or Latin American history.
(4) A research paper written in a History 407 Seminar. In exceptional circumstances, a term paper written in a History 408 Colloquium or in a 400 level lecture course may be expanded into a research paper. Students expanding a tern paper are to enroll in Hst 405 Reading and Conference for two credit hours.
(5) A grade average of 2.25 or higher in history courses.
Option Two: The History Major zvith a concentration on a time period, a geographical area, or an important theme. In these programs, courses outside of history which relate to the student's theme, period, or area will be an integral part of the program.
Examples of such programs are available in the departmental office. A student pursuing a program of this kind will need the continuing guidance of a faculty member. Specific requirements are as follows:
(1) Satisfaction of the University requirements for the Bachelor of Arts degree.
(2) No later than the second term of the junior year, the student and adviser will plan a program of courses in history and related fields centering upon the study of a theme, period, or area and submit it to the department for approval. A thematic approach may, for example, focus on revolutions, warfare, the city, or the development of science; a period approach may concentrate on a span of time in one country such as post-Meiji Japan or colonial America, or in several countries as in the study of Early Modern Europe ; an area approach may deal with the common historical problems found, for example, in Latin America, or Central and Eastern Europe, or the Atlantic Community. (3) A grade average of 2.25 or higher in courses counted towards satisfaction of major requirements.

Option Three: The History Major zith an endorsement in Social Studies. The specific requirements are as follows: (1) Satisfaction of the University requirements for the Bachelor of Arts or Bachelor of Science degree.
(2) Forty-five credit hours in history courses of which 27 must be upperdivision, including at least 12 credit lours in courses numbered 400-499. Upper-division courses are distributed as follows: (a) 9 credit hours in European history; (b) 12 credit hours in United States history ; (c) 9 credit hours in Asian, African, or Latin American history. (With the approval of the adviser, nine credit hours of upper-division anthropology, geography, political science, religion, or art history courses dealing with Asia, Africa or Latin America may be substituted for history courses in meeting this requirement and will count toward the major.) (d) History 407 Seminar ; or History 408 Colloquium and 2 credit hours in History 405 Reading and Conference resulting in a research paper ; or 2 credit hours in History 405 to complete a research paper written in conjunction with a 400 -level course. (3) Certification as a secondary school teacher with the social studies endorsement requires satisfactory completion of a program of teacher preparation which includes additional subject matter preparation in the social sciences and work in professional education, plus recommendation of the institution in which the preparation is completed. The department offers work toward initial or basic certification and toward standard certification. The University's program to prepare social studies teachers is subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission, January 1, 1980. For specific informaeffective January 1, 1980. For specific information regarding department requirements for the social studies endorsement, students should talk to the departmental norm adviser for teacher education, and the Office of Secondary Education in the College of Education.

History Scholars Program. The purpose of this program is to provide an opportunity for able and highly motivated majors in history to develop their interests in historical enquiry through an Honors Colloquium and independent reading, research, and writing.

Each spring, the department will invite junior majors with a grade average of 3.5 or higher to participate in this program. Other students may be
admitted on application to the director of the History Scholars Program.

Students admitted in the fall will enroll in the Honors Colloquium (3 credit hours) given winter term, following which they will begin preparatory work for a thesis to be completed in the senior year. Those who complete satisfactorily the Colloquium, 7 credit hours of History 403 Thesis, and a senior thesis; who pass an oral examination on the thesis and related work; and who satisfy the requirements of one of the three history major options (toward which courses taken as part of the History Scholars Program will count), will be eligible for the baccalaureate degree with Honors in History.

## Graduate Studies

The department offers graduate instruction leading to the degrees of Master of Arts and Doctor of Philosophy.
General Requirements for the Master of Arts degree: Graduate students in history are expected to have completed a well-rounded course of study in the liberal arts with emphasis upon history. Students must demonstrate a basic foreign language ability either through satisfactory completion of the second year of college study or by passing a Graduate Students Foreign Language Test (GSFLT), or a comparable examination, in French, German, Russian, Spanish, Chinese, Japanese, Latin, Greek, or other language as approved by the candidate's adviser and the Graduate Review Committee of the Department of History.

A candidate must complete the work for the degree within two years of residence. Each student must complete at least two terms in the standing field seminar in American, European or East Asian history. Students must complete at least 9 credit hours in Hst 507 Seminar, Hst 508 Colloquium, or Hst 505 Reading and Conference.
Students must demonstrate competence, through written examinations, in two of the fields listed below. Candidates for the degree with thesis may substitute for one of the written examinations an oral examination to be taken at the time of the examination on the thesis. One of the fields selected must include the area of European History before 1815, or East Asia, or Latin America.
(1) Ancient History; (2) Europe to 1500; (3) Europe 1400-1815; (4) Europe 1789 to the present ; (5) United States History ; (6) England since 1485; (7) Russia; (8) East Asia; (9) Latin America; (10) A general field in history devised by the student
in consultation with the student's adviser and approved by the Graduate Review Committee.

In addition, candidates must choose one of the following plans:
Master's Degree with Thesis: The candidate must submit a thesis demonstrating ability to utilize and interpret historical material. The candidate must register for 9 hours of Hst 503 Thesis and may register for 6 hours of Hst 501 Research for which credit will be received upon passing the final oral examination covering the thesis.
Master's Degree without Thesis: The candidate must submit two research papers that have been recommended by the instructors of seminars or other courses in which they were presented. The candidate's adviser should be the supervisor of one of the papers. Since the papers and examinations require additional work beyond credit earned in courses, the candidate may register for up to 12 hours of Hst 501 Research for which credit will be received upon passing the final oral examination covering the research papers.

The Master's Degree in Teaching with concentration in history (thirtysix hours in history and nine hours in education) is available to holders of teaching certificates.

General Requirements for the Doctor of Philosophy degree:

For the Ph.D. degree, the student must pass an oral qualifying examination at the time of registration. The candidate must pass reading examinations in two foreign languages, comprehensive examinations in four of the above fields of history (a related field outside history, or a field designed especially for the individual program may be substituted for standard fields above), and complete 18 credit hours of research seminars. Every candidate must take either a minor or supporting work in a related field outside the field of history. The dissertation must show evidence of orginality and ability in independent investigation.

## Undergraduate Courses

Hst 101, 102, 103. History of Western Civilization. 3 credit hours each term. An introduction to the historical development of the Western world. Lectures and readings deal with the major changes in value systems, ideas, social structures, economic institutions, and forms of political life. Fall : Ancient and Medieval societies ; winter : from the Renaissance to Napoleon; spring: 19th and 20th centuries. Hst 102, 103 not open to students in Hst 104, 105, 106.
Hst 104, 105, 106. The Making of Modern Europe. 3 credit hours each term. An introductory course in the history of modern

Europe, 1450 to the present, designed especially for freshmen and sophomores. A survey of the main themes of European history from the Renaissance and Reformation to the present : fall, the Renaissance to 1713 ; winter, enlightenment, French Revolution, and 19th century to 1848 ; spring, 1848 to the present. Not open to students who have credit in Hst 102, 103. Brady, Kimball.

## Hst 107, 108, 109. History (Honors

College). 3 credit hours each term. Significant events, ideas, and institutions in the development of Western civilization.
Hst 110, 111, 112. World Civilizations. 3 credit hours each term. An introduction to the major world civilizations and their historical interaction. Lectures and readings deal with political, religious, and social thought, institutions, and developments. Fall : origins of civilizations in the Middle East, the Mediterranean area, the Indian subcontinent, and China to the end of the ancient era. Winter : modern civilizations during the era of Western imperialism. Spring : modern civilizations during the present century of world crisis. Sorenson.

## Hst 199. Special Studies. 2-3 credit hours

 each term. Lower-division problem-oriented courses rarely enrolling more than 30 students. Designed for students interested in history who may or may not become majors. Recent topics: War and Ancient Society, The Slavic World, The Environment in American History, Religion and Revolt.Hst 201, 202, 203. History of the United States. 3 credit hours each term. The development of the American political and cultural tradition with an emphasis on those issues and themes that show how the present is connected with the past. Fall : Puritanism and Revolution, The Enlightenment and Romanticism; winter: Expansion, Disunion, Reconstruction, and the Gilded Age; spring: War, Peace, Politics and Social Change in the 20th Century.
Hst 216. War and the Modern World. 3 credit hours. The evolution of the conduct of war in the 19th and 20th centuries as a reflection of social, political, and technological developments. The end of classical warfare, Napoleon, Clausewitz, American Civil War, industrialization of warfare, militarism, World War I, World War II, guerrilla warfare. Chickering.
Hst 231. History of Southern Africa. 3 credit hours. South Africa and her neighbors since the 16th century. Conflict and cooperation among Bantu, Boers, and Britons; growth of the first modern industrial society in Africa ; apartheid and authoritarian government. Smith.

## Hst 290. Foundations of East Asian

 Civilization. 3 credit hours. A thematic, interdisciplinary introduction to traditional China and Japan. Literature and art as well as materials drawn from social and political history will be used to present East Asian civilization as a coherent whole, while a thematic approach will offer unity and depth. Some typical themes: Man and the universe; individual, family and state ; women; the common man; center and periphery. Nakai.Hst 291. China, Past and Present. 3 credit hours. An introduction to key aspects of traditional and contemporary China, structured around the problem of continuity and change. Chinese values and social structure, both Confucian and Communist ; the Chinese state system, under the Emperors and under Mao Tse-tung; the family village, city, economy, and foreign relations of China in both traditional and contemporary times. Esherick.

Hst 292. Japanese Society Past and
Present. 3 credit hours. A first introduction to Japanese culture emphasizing persistence and change in value and social behavior. Topical and analytical approach stressing interdependence of peculiarly Japanese institutions and processes for understanding this unique people. Falconeri,
Hst 301, 302, 303. Europe since 1789. 3 credit hours each term. Political, social, economic, and cultural trends from the French Revolution to the present. Fall: 1789 to 1870 ; winter : 1870 to 1918 ; spring : 1918 to the present. Berdahl, Pierson.
Hst 304, 305, 306. English History. 3 credit hours each term. A survey of British history from Roman times to the 20th century. Fall: institutional, constitutional, and economic development of England from the RomanoBritish period to the 16th century. Winter : political, religious, economic, and social change from the Tudor age to the Industrial Revolution. Spring: the Victorian age and the 20th century with emphasis upon the background of modern Britain's social and economic problems and position in Europe and the world. Lang, Smith.
Hst 307, 308. American Radicalism. 3 credit hours each term. Radical challengers of the established order in church and state : the Puritans, the 18th-century revolutionaries, and the nullifiers. The abolitionists, the communal experiments, anarchists, Marxists, and their opponents. Pope.

## Hst 311. Reformation Europe. 3 credit

hours. Europe in the 16th century with emphasis on the Reformation and Counterreformation as the last great crisis of feudal Europe ; the end of Mediterranean economic and cultural supremacy and the rise to hegemony of Atlantic Europe. Brady.
Hst 312. The Crisis of the 17th Century. 3 credit hours. Seventeenth-century Europe seen in terms of a prolonged crisis. Economic depression, warfare, social dislocation, midcentury revolutions; the plight of peasants and townspeople ; the attempts of absolutist regimes to offer ways out of crisis; traditional culture and the challenge of science and rationalism. Birn.
Hst 313. Enlightenment and Revolution: Europe, 1715-1799. 3 credit hours.
Eighteenth-century Europe: the Golden Age of aristocratic society, the liberal challenge, and the revolutionary upheavals; the Enlightenment and its effects upon both elite and popular culture ; European expansion and the demographic revolution. Birn.
Hst 321, 322. History of American Foreign Relations since 1941.3 credit hours each term. Hst 321 : Second World War and origins of the Cold War, 1941-1946. Military, political, and diplomatic developments. Hst 322 : American foreign policy since 1945 ; the Cold War. Holbo.
Hst 324, 325, 326. Byzantium and the Slavs. 3 credit hours each term. Fall : from Rome to Byzantium, 284-610; winter : the Byzantine Apogee, 610-1071; spring: Byzantium and the Slavs. Offered alternate years. Alef.
Hst 331. Perceptions and Roles of Women from the Greeks through the 17th Century. 3 credit hours. The way in which perceptions about women's role in society in part reflected and in part contrasted with their actual role in society. Mate.
Hst 332. Women and Social Movements in Europe from 1750 to the Present. 3 credit hours. Methods used by women to improve their position in society, including participation in revolution, voting, and practicing birth control. Reasons for the success or failure of these methods and analysis of the merits of
other solutions proposed by various writers. Mate.
Hst 350, 351, 352. Hispanic America. 3 credit hours each term. A three-part survey of Latin American history emphasizing major economic, political, and cultural trends and continuities. The first term deals with the background and colonial period: the second, problems of nationhood in the 19 h century: the third, developments since 1914. Falcoff. Hst 363. History of Canada. 3 credit hours A survey of the growth of Canada from colony to nation. Emphasis on British and French influences, relations with the United States, the backgrounds of constitutional, economic and cultural problems of Canada today. Smith Hst 375. American Towns and Cities to 1900. 3 credit hours. Settlement and growth of urban centers ; economic functions of port, river, canal, and railroad towns; expanding role of municipal government ; origins of city planning ; urban corruption and reform movements ; opportunities for rural Americans and immigrants in 19th-century towns and cities. Wade
Hst 376. The American City in the 20th Century. 3 credit hours. Growth of cities as dominant locales in American life ; demographic and cultural changes in urban life and their effects on American values, habits, and public policy; structural similarities and regional and individual variations in city growth ; ethnic and class relations in different urban settings. Toll.
Hst 380, 381, 382. Afro-American History. 3 credit hours each term. Survey of African civilizations; the slave trade; development of the blacks, free and slave, as a subculture. Toll.
Hst 391, 392, 393. East Asia in Modern Times. 3 credit hours each term. Political, social, and diplomatic history of China and Japan, with some attention to Korea and Southeast Asia, from 1800 to the present. Falconeri.
Hst 403. Thesis. Credit hours to be arranged. A no-grade course.
Hst 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses <br> Carrying Graduate Credit

Hst 407. Seminar. (G) Credit hours to be arranged. Recent topics : American Biography, Japanese Militarism, Plato and Athens, Ethnicity and Social Structure.
Hst 408. Colloquium. (G) Credit hours to be arranged. Recent topics: Russian Aristocracy, 17th-Century Europe, Mexican Revolution, Women in the Middle Ages.
Hst 409. Supervised Tutoring Practicum. $1-3$ credit hours any term. A no-grade course
Hst 410. Experimental Course. (G) 3 credit hours. Upper-division problem-oriented courses customarily enrolling 15 to 30 students.' Topics in 1978-79 will include the French Revolution, and Marriage and Sex Roles in Japanese history, Origins of American Culture. Staff.
Hst 411. History of Greece. (G) 3 credit hours. Political, social, and cultural history of the Hellenic world from the Mycenaeans to Alexander the Great. Linderski.
Hst 412, 413. History of Rome. (G) 3 credit hours each term. Winter : political, social, and constitutional history of Rome from its earliest beginnings to the end of the Republic ; spring : the period of the Empire. Linderski.

Hst 421, 422, 423. Middle Ages. (G) 3 credit hours each term. Social, political and economic conditions in Western Europe from 476-1450. Fall : from 476-1000; the collapse of the Roman Empire and the rise of Carolingian Europe. Winter: 1000-1250; the development of the French and English monarchies, the growth of towns and trade, and the flowering of the 12 th-century renaissance. Spring 1250-1450 ; the growth of parliament, changes in religious and intellectual life, and the impact of war and the Black Death on 14thcentury economy and society. Mate.
Hst 430. Renaissance Italy. (G) 3 credit hours. Renaissance humanism and its social foundations; the rise and fall of the urban republics and the building of the city-states social and political basis of the Florentine Renaissance ; civic humanism from Petrarch to the mid-15th century : humanism and neo-Platonism and the resurgence of the aristocracy; the Italians around 1500 ; Machiavelli and Castiglione. Brady.
Hst 432. Problems in the German Reformation. (G) 3 credit hours. The German Reformation as an ideological and social movement; Hussitism and the anti-feudal movement in Germany ; nominalism, mysticism, humanism and the revolt of Luther ; the Peasants War, Anabaptism and the lost revolution; the urban reform ; the princes reform and the rise of Protestantism. Brady.
Hst 434, 435. Making of the Western Mind.
(G) 4 credit hours each term. Foundations and development of Western thought. Hst 434 : Classical and early Christian thought and the Medieval synthesis; Reformation ideas; the Scientific Revolution; Enlightenment and French Revolutionary Thought. Hst 435 : Conservatism and reaction; romanticism and idealism ; liberalism, Darwinism, republicanism, Marxism. Sorenson.
Hst 436, 437. History of Germany. (G) 3 credit hours each term. First term : from the Peace of Augsburg (1555) to the death of Frederick the Great (1786). Second term : to the fall of Bismarck (1890). Berdah1, Chickering.
Hst 438. Germany in the Twentieth Century. (G) 3 credit hours. Domestic tension and outward pressure during the Wilhelmine empire ; the German Revolution ; the Weimar Republic ; National Socialism; Germany since 1945. Chickering.
Hst 439. From Wordsworth to Marx. (G) 3 credit hours. Major issues in the cultural and intellectual life of Europe 1790-1850. Pierson
Hst 440. From Nietzsche to Freud. (G)
3 credit hours. Major issues in the cultural and intellectual life of Europe 1870-1920. Pierson.
Hst 441, 442, 443. History of France. (G) 3 credit hours each term. Survey of French history from the Old Regime to the Present. Fall (from the end of the Middle Ages to the French Revolution) : The establishment of centralized monarchy ; society in the Ancien Regime; 17th-century classicism ; the collapse of the old order. Winter (1789-1870) : The French Revolutions of 1789, 1830 and 1848 ; the Napoleonic Empire ; monarchy, republicanism and dictatorship after 1815 ; society, art and religion in post-revolutionary France. Spring (1870-present) : The Paris Commune and Third Republic ; the Dreyfus Affair ; Popular Front, Fall of France and Resistance; Algeria, de Gaulle and the student movement of 1968. Birn, Sheridan.
Hst 444, 445. Twentieth-Century Europe. (G) 3 credit hours each term. Political, socio-economic, military, diplomatic, and intellectual aspects of European history since
1900. Stresses the European responses to the two world wars and the depression. First term covers up to 1929; the second term, to the present. Chickering.
Hst 447, 448, 449. History of Russia. (G) 3 credit hours each term. Fall: the Kievan state and the emergence of Muscovy; winter: creation of the Russian Empire, political, social and economic developments ; spring: revolutionary Russia, 1861 to the present. Alef, Kimball
Hst 450, 451. History of Spain. (G) 3 credit hours each term. A survey of Spanish history from the earliest settlements through the most recent period. First term : rise of the Spanish nation, the Golden Age and the Overseas Empire, the causes of decline, and the Bourbon reforms. Second term : the land question, church-state relations, separatist movements, and the civil war. Falcoff.
Hst 452, 453. The Russian Revolution. (G) 3 credit hours each term. The origins of the Revolution ; transition and instability in prerevolutionary Russia. The consequences of the Revolution ; the place of the 1917 Revolution in the European and world revolutionary traditions. Kimball.
Hst 454, 455, 456. Economic History of Modern Europe. (G) 3 credit hours each term. The social and economic development of modern Europe. Fall: from the beginnings of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter : late eighteenth century to end of nineteenth century ; spring: twentieth century. Sheridan.
Hst 457, 458, 459. The Era of American Sectional Conflict. (G) 3 credit hours each term. The United States during the 19th century, focusing on the origins, events, and effects of the sectional conflict whose military phase was the Civil War. Fall : from Jefferson to Polk; winter : sectional crisis and civil war ; spring: Reconstruction and the late 19th century. Maddex.
Hst 460, 461, 462. History of American Thought and Culture. (G) 3 credit hours each term. Fall: 1600-1828, Tidewater society ; Puritanism ; Franklin and Colonial culture ; the moving frontier ; early American arts and science ; conflicting ideologies and the American Revolution; Jeffersonian Democracy. Winter: 1828-1898, Jacksonian society; Manifest Destiny ; Transcendentalism and reform ; romanticism and realism in American art ; Social Gospel; Darwinism ; Mark Twain's America. Spring: 1898-1970s, Manifest Destiny revived; rationale of Progressive Movement ; the Golden Twenties; New Deal society; arts and values in wartime ; counter cultures ; civil rights ; ecology ; Watergate. Bingham.
Hst 463. History of the South. (G) 3 credit hours. A survey of the regional history of the American South, and of successive Southern ways of life. Evolution of the South as a slaveholding society, its bid for independence, and its subsequent redefinitions and adaptations to national norms. Maddex.
Hst 464. History of Mexico. (G) 3 credit hours. A survey of Mexican history from 1810 to 1946. Special attention is given to the problems of nationhood, economic development, church-state relations, the quest for a Mexican identity, and the origins and course of the Revolution of 1910 . Falcoff.
Hst 465. Cuba in the Modern World. (G)
3 credit hours. A survey of Cuban history from the fall of Havana to the British in 1762 to the Missile Crisis of 1962 . Special emphasis is given to the development of social and economic institutions-monoculture, slavery, economic dependency on outside areas-and to
the intellectual and cultural tensions in the late 19th and 20th centuries. Falcoff.

## Hst 466. Tudor England. (G) 3 credit

hours. The political, social, economic, and intellectual development of England through the reigns of the Tudor sovereigns, 1485-1603. Lang.

## Hst 467. Stuart England. (G) 3 credit

hours. A survey of England in the period 1603-1714, with attention to political, economic, social, and intellectual change. Special emphasis is given to the English Revolution of 1640-1660. Lang.
Hst 468. Victorian England. (G) 3 credit hours. Britain 1815 to 1901. Evangelicalism, Benthamism, population growth ; Victorian social controls ; political and economic problems of industrialization and urbanization; growth of empire. Smith.
Hst 469. Twentieth-Century England. (G) 3 credit hours. Decline of liberalism and rise of labor ; consequences of two world wars upon Britain's domestic and international affairs; new policies toward education, public welfare; loss of Ireland and the Empire. Smith.
Hst 470, 471. American Social History. (G) 3 credit hours each term. A study of American society in the 19th and 20th centuries; population changes due to immigration and internal migration ; ethnic and religious organizations; adaptations to industrialization and urbanization; changes in class structure and the status of women; social reform and social legislation ; definitions of the American character. First term: 19th century ; second term : 20th century. Wade.
Hst 472. The Negro in American History. (G) 5 credit hours. Afro-American history from West Africa in the days of the slave trade to the "black revolution" of the 1960 s.
Hst 473, 474, 475. American Foreign Relations. (G) 3 credit hours each term. The character and consequences of American foreign policies. Fall : from the Revolution to the Civil War ; winter : to World War I; spring : through World War II. Segments are independent. Holbo.
Hst 476, 477. The American West. (G) 3 credit hours each term. The American frontier. First term : the early American frontier; second term : the Great Plains and the Far West.
Hst 478. Pacific Northwest. (G) 3 credit hours. Survey of the region's history from before European contacts to the mid-20th century. Examination of the degree to which the history of the Pacific Northwest mirrors the national experience and the degree to which the region has a distinctive history and culture. Bingham.
Hst 479. American Labor Movement. (G) 3 credit hours. A survey of the trade union movement from the 1880 s to the present, with emphasis upon varieties of employment and work experience; relationships between organized and unorganized, male and female workers; philosophies of labor leaders; causes and results of major strikes; state and federal labor legislation ; and political activities of organized labor. Wade.
Hst 480, 481, 482. The United States in the Twentieth Century. (G) 3 credit hours each term. A study of society and politics during the 20th century, emphasizing the transformation of the United States from a rural to an urbanized society and from a continental to a world power. Fall : from 1900-1921; industrialization; urbanization; immigration; Progressive movement ; World War I. Winter : 1921-1945; the Twenties ; depression and New Deal ; World War II and its social
consequences. Spring : 1945 to present ; cold war : consumer culture ; civil rights; the Sixties ; politics after Vietnam and Watergate.
Hst 485, 486. American Social Formation: 17th and 18th Centuries. (G) 3 credit hours each term. An examination of social and cultural developments during the first half of American history. A combination of lectures, independent study, and discussion seminars. Hanna.
Hst 487, 488, 489. American Economic
History. (G) 3 credit hours each term.
The economic development of the United States. First term : European settlement to 1861: Colonial America as pre-industrial society; economic significance of independence ; growth in the pre-Civil War era; economics of slavery and sectional conflict. Second term : 1861-1914: Causes, costs and benefits of rapid industrialization; economic development and social conflicts; government regulation and coordination. Third term : Growth, cycles and crises; impact of war ; the Great Depression ; post-World War II boom ; current problems in historical perspective. Pope.
Hst 490. The Era of Jackson. (G) 4 credit hours. The triumph and consequences of the Jeffersonian ideology during the administration of Andrew Jackson. Not offered in 1978-79.
Hst 491, 492. Thought and Society in East
Asia. (G) 3 credit hours each term. Key issues in the intellectual life of China and Japan, with emphasis on the interaction between ideas and their social and political context. First term : to 1800 ; second term: 1800 to the present. Nakai.
Hst 494, 495, 496. History of China. (G) 3 credit hours each term. Fall: from the city-state of Shang through the feudal age to the cultural, economic and bureaucratic heights of the Sung ( $960-1279$ ) ; winter : quickly through the Mongols and the Ming to a consideration of the impact of imperialism in the Ch'ing (1644-1911) ; spring : the Chinese revolutionary experience in the 20th century. Nakai, Esherick.
Hst 497, 498, 499. History of Japan. (G) 3 credit hours each term. Fall: 660 B.C. to 1600 ; mythology, Shinto, Buddhism, courtly aesthetics and the warrior in the formation of a unique cultural tradition; winter: to World War I; confrontation with the West, emergence from isolation, Japanese imperialism; spring: to the present; democracy, ultranationalism and the New Order, World War II disaster, U.S. occupation, and postwar surge to superstate status. Nakai, Falconeri.

## Graduate Courses

Hst 501. Research. Credit hours to be arranged.
Hst 502. Supervised College Teaching. Credit hours to be arranged.
Hst 503. Thesis. Credit hours to be arranged. A no-grade course.
Hst 505. Reading and Conference. Credit hours to be arranged.
Hst 507. Seminar. Credit hours to be arranged. The seminars offered vary from year to year, depending on interests and needs of students and open availability of faculty. Typical subjects offered are:
Greek and Roman History. Linderski.
European History : Standing Seminar. Brady. European History: English 19th and 19th Centuries. Smith.
European History ; English 16th and 17th
Centuries. Lang.

European History: Medieval Russia. Alef. European History : Cultural and Intellectual. Pierson.
European History : Modern Russia. Kimball. European History : Social and Economic. Sheridan.
European History : German. Berdahl, Chickering.
United States History : Standing Seminar. Brown.
United States History: American Biography. Bingham.
United States History : Diplomatic. Holbo
United States History: Economic. Pope.
United States History : Social, Labor. Wade.
United States Ethnic History. Toll.
United States Recent.
East Asian History. Esherick, Falconeri, Nakai.
Latin American History. Falcoff.
Historical Theory. Sorenson.
Hst 508. Colloquium. Credit hours to be arranged. The colloquia offered vary from year to year, depending upon interests and needs of students and upon availability of faculty. Typical subjects offered are:
Ancient History. Linderski.
Middle Ages. Mate.
Renaissance and Reformation. Brady.
Seventeenth-Century England. Lang.
Medieval Russia. Alef.
Modern Russia. Kimball.
Age of Enlightenment. Birn.
German History. Berdahl, Chickering.
European Social and Economic History. Sheridan.
Interpretations of American History. Hanna.
Southern History. Maddex.
American Diplomacy. Holbo.
American Economic History. Pope. American Social History. Wade. Interpretations of Latin-American History. Falcoff.
Japanese History. Nakai, Falconeri.
Chinese History. Nakai, Esherick.
Historiography. Birn, Sorenson.
Women's History. Mate.
Hst 509. Supervised Tutoring Practicum. 1-3 credit hours any term. A no-grade course.

## Linguistics

## Faculty

Clarence Sloat, Ph.D., Department Head, Professor of Linguistics and English. B.A., 1958, M.A., 1960, Idaho State ; Ph.D., Washington, 1966. Colette G. Craig, Ph.D., Assistant Professor of Linguistics. Licence, 1968, Maitrise, 1969, Université de ParisNanterre; Ph.D., 1975, Harvard. James E. Hoard, Ph.D., Associate Professor of Linguistics and English. B.A., 1963, M.A., 1966, Ph.D., 1967, Washington.
Derry Malsch, Plı.D., Associate Professor of Linguistics and English. B.A., 1965, M.A., 1967, Chicago ; Ph.D., Wisconsin, 1971.
The University offers curricula in linguistics leading to the Bachelor of Arts and Master of Arts degrees. These curricula are administered by the Department of Linguistics. The Departnient of English offers work leading to the Doctor of Philosophy degree with a major concentration in English linguistics and the possibility of substantial preparation in other areas of linguistics.

## Undergraduate Studies

Programs in linguistics offer instruction in the nature of language and the analysis of particular languages. The primary aim of linguistic science is to develop a theory which accounts for the human ability to communicate by means of natural language. Although linguists may work with individual languages, they are in search of properties and processes common to all languages. Such common features of human languages are thought to reflect basic aspects of the structure of the human mind. The concerns of linguistics for precision and formality give it an affinity with mathematics, logic, and computer science. Linguistics also has close ties to several of the humanities and social sciences. Its concern for properties of the mind link it closely to philosophy and psychology. The social context of language use gives linguistics a connection with anthropology, sociology, and the various language and literature disciplines. Linguists work in areas as varied as child development. college teaching, cryptography, lexicography, preparation of language descriptions and teaching materials, and translation.

The baccalaureate degree provides a basis for graduate study in linguistics and in interdisciplinary fields ( such as
psycholinguistics, the philosophy of language, and computational linguistics), as well as opportunities for advanced work in a range of applied linguistics fields (including the teaching of certain foreign languages, teaching English as a foreign language, reading, and language arts)
Requirements for the Bachelor of Arts Degree.
(1) Two years of one foreign language and one year of another.
(2) (a) Ling 150. Classical Elements of English. 3 credit hours; Ling 290. Introduction to Linguistics. 4 credit hours; Ling 411. Articulatory Phonetics. 4 credit hours; Ling 450. Phonology and Morphology. 3 credit hours; Ling 451, 452. Syntax and Semantics. 3 credit hours each term; Ling 460. Historical and Comparative Linguistics. 3 credit hours; Ling 489. Dialect Geography. 3 credit hours ; Ling 490. Sociolinguistics. 3 credit hours. (b) At least nine additional credit hours selected from: (i) Courses with linguistics designations; (ii) Eng 491. History of the English Language. 3 credit hours; Eng 492. Applied English Linguistics. 3 credit hours; Eng 493. Structure of English. 3 credit hours ; RL 331, 332, 333. French Pronunciation and Phonetics. 2 credit hours each term ; RL 350, 351. Spanish Pronunciation and Phonetics. 2 credit hours each term ; SL 324. Russian Phonetics. 3 credit hours; (iii) Any courses numbered 400 or 411-499 in the list of courses approved for the Master of Arts program.
(3) Upper-division courses applied toward niajor requirements nust be taken on a pass-differentiated basis. Majors in linguistics must have their programs approved periodically by an adviser from the Department of Linguistics.

## Graduate Studies

The Master of Arts program in linguistics provides curricula that combine a general foundation of required courses with a wide choice of areas of specialization. Graduate linguistics courses are also open to students in disciplines for which linguistics is a necessary or useful background.

Research equipment includes the language laboratory, sound reproduction equipment, a sound spectrograph, and University computer facilities.

A limited number of graduate teaching fellowships are available to qualified applicants. Interested students should write directly to the department head.

## Prerequisites for Admission.

(1) Courses in linguistics equivalent to Ling 450 and Ling 451, 452.
(2) Two college-level years of a language not native to the student.

Students who do not meet these prerequisites, but have an undergraduate major in a related field (such as anthropology, computer science, English, a foreign language, mathematics, philosophy, psychology, sociology, or speech pathology and audiology), may be accepted with the provision that deficiences be made up as soon as possible after beginning the master's program. General University regulations governing graduate admission appear in the Graduate School section of this catalog.

Requirements for the Master of Arts Degree. (1) Two terms of Ling 507.
Seminar. 5 credit hours each term.
(2) Ling 514, 515, 516. Linguistic Theory. 9 credit hours.
(3) Three terms of Ling 507. Colloquium. 1 credit hour each term.
(4) Eight additional credit hours in regular linguistics courses and seminars carrying graduate credit.
(5) Regular courses and seminars comprising a minimum of 15 credit hours selected from: (a) linguistics courses carrying graduate credit ;
(b) Anth 456, 457, 458. Communication and Culture. (G) 3 credit hours each term ; Chn 440 . History of the Chinese Language. (G) 3 credit hours; Chn 441. Applied Chinese Phonetics. (G) 3 credit hours ; Chn 442. Morphology and Syntax. (G) 3 credit hours; Chn 443. Semantic Structure of Chinese. 3 credit hours. CS 521, 522. Theory of Computation. 4 credit hours each term; Eng 511. Old English. 5 credit hours; Eng 514. Old Icelandic. 5 credit hours; Eng 517. Middle English Dialects. 5 credit hours; Eng 520, 521, 522 ; History and Structure of the English Language. 5 credit hours each term; GL 498. Applied German
Phonetics. (G) 3 credit hours; GL 514. Introduction to Middle High German. 5 credit hours; GL 530, 531. Old High German. 5 credit hours each term; GL 532. Introduction to Gothic. 5 credit hours ; GL 534. History of New High German. 5 credit hours; GL 539. Introduction to Old Saxon. 5 credit hours. Psy 476. Language Acquisition. 3 credit hours; Phl 461, 462. Symbolic Logic. (G) 3 credit hours each term; SL 440, 441, 442. Structure of Russian. (G) 3 credit hours each term; SL 540 . Old Church Slavonic. 3 credit hours; SL 541, 542. History of Russian. 3 credit hours each term ; SPA 57.0. Psychology of Speech. 3 credit hours;

SPA 573. Speech and Language Development. 3 credit hours; (c) relevant seminars in related disciplines. (6) A four-hour terminal comprehensive examination on synchronic and diachronic theory and method.

## Undergraduate Courses

Ling 150. Classical Elements of English. 3 credit hours each term. The analysis of English word structure as a means of building vocabulary. The study of Latin and Greek roots, prefixes, and suffixes.
Ling 199. Special Studies. 1-3 credit hours.
Ling 290. Introduction to Linguistics. 4 credit hours. Introduction to the scientific study of language. Examination of the characteristics of language and language diversity, including sounds, structure, linguistic change, and theories of origin. The relation of linguistic science to the social sciences and to the humanities. Credit in Ling 290 precludes credit in Ling 421.

## Upper-Division Courses <br> Carrying Gradtate Credit

Ling 401. Research. (G) Credit hours to be arranged.
Ling 403. Honors Thesis. (g) 1-6 credit hours.
Ling 405. Reading and Conference. (G) Credit hours to be arranged.
Ling 407. Seminar. (G) Credit hours to be arranged.
Ling 409. Supervised Tutoring: Practicum. (G) 1-3 credit hours any term.

Ling 411. Articulatory Phonetics. (g) 4 credit hours. Study of the classification of speech sounds according to the manner of their production. Prerequisite : Ling 290 (may be taken concurrently).
Ling 421. Elements of Linguistics. (g) 3 credit hours. Not intended for majors. The basics of linguistic study, including introductory syntax, semantics, phonology. Credit in Ling 421 precludes credit in Ling 290.
Ling 430. Acoustic and Experimental Phonetics. (G) 3 credit hours. Experimental and classificatory study of the acoustic properties of speech sounds. Offered alternate years. Prerequisite : Ling 411.
Ling 443. Methodology of Language Teaching. (G) 3 credit hours. Introduction to the theories and techniques of teaching the pronunciation, grammar, and vocabulary of foreign languages. Prerequisite : Ling 290 or Ling 421.
Ling 444. Teaching English as a Second Language. (G) 3 credit hours. Introduction to the methods and materials for teaching English to speakers of other languages. Prerequisite : Ling 290 or Ling 421.
Ling 450. Phonology and Morphology. (g) 3 credit hours. An introduction to the study of sound systems and the structure of words. A variety of phonological problems will be considered with the goal of examining current phonological theory. Examples will be drawn from English and other Indo-European languages, as well as from American Indian, Asian, Oceanic, and African languages. Prerequisite : Ling 411 or the equivalent.

Ling 451, 452. Syntax and Semantics. (g) 3 credit hours each term. An introduction to the study of sentence structures in various languages and how these structures convey meaning. The course covers current techniques and theories for the analysis of sentential and lexical data. Prerequisite: Ling 290 or Ling 421.
Ling 460. Historical and Comparative Linguistics. (G) 3 credit hours. An introduction to the principles of language change and of the comparative method with particular stress on the Indo-European language family. Offered alternate years. Prerequisite : Ling 450.
Ling 489. Dialect Geography. (G) 3 credit hours. Investigation of the assumptions and methods of dialectology. A survey of principal dialect studies and atlas projects, including an examination of the major differences between British and American English, and of the principal dialect areas of the United States. Offered alternate years. Prerequisite: Ling 450.
Ling 490. Sociolinguistics. (G) 3 credit hours. Introduction to the study of language in a social matrix. Examination of social class and ethnic dialects, argots, and multilingual societies. Offered alternate years. Prerequisite : Ling 450 or Ling 451 and 411.

## Graduate Courses

Ling 501. Research. Credit hours to be arranged. A no-grade course.
Ling 503. Thesis. Credit hours to be arranged. A no-grade course.
Ling 505. Reading and Conference. Credit hours to be arranged.
Ling 507. Seminar. Credit hours to be arranged. Recent seminar topics in linguistics and related disciplines have been:
Phonology.
Syntax.
Semantics.
Psycholinguistics.
Lexical Structures.
Linguistic Variation.
Indo-European Linguistics.
Linguistic field work.
Historical Linguistics.

Ling 514, 515. Linguistic Theory. 3 credit hours per term. A detailed investigation of current developments in syntax and semantics. Prerequisite : Ling 452.
Ling 516. Linguistic Theory. 3 credit hours.
A detailed investigation of current developments in phonology. Prerequisite : Ling 450.


## Mathematics

## Faculty

Fred C. Andrewes, Ph.D., Department Head, Professor of Mathematics (statistics). B.S., 1946, M.S., 1948, Washington ; Ph.D., California, Berkeley, 1953.
Frank W. Anderson, Ph.D., Professor of Mathematics (algebra). B.A., 1951, M.S., 1952, Ph.D., 1954, Iowa.

Bruce A. Barnes, Ph.D., Professor of Mathematics (Banach algebras, operator theory). B.A., Dartmouth, 1960 ; Ph.D., Cornell, 1964.
Richard B. Barrar, Ph.D., Professor of Mathematics (applied mathematics, differential equations). B.S., 1947, M.S., 1948, Ph.D., 1952, Michigan. Glenn T. Beelman, A.M., Senior Instructor in Mathematics; Assistant to the Department Head. B.S., South Dakota State, 1938 ; A.M., George Washington, 1962.
Paul Civin, Ph.D., Professor of Mathematics and Associate Provost for Planning (Banach algebras). B.A., Buffalo, 1939 ; M.A., 1941, Ph.D., 1942, Duke.
Charles W. Curtis, Ph.D., Professor of Mathematics (algebra). B.A., Bowdoin, 1947 ; M.A., 1948, Ph.D., 1951, Yale. Micheal N. Dyer, Ph.D., Professor of Mathematics (algebraic topology). B.A., Rice, 1960 ; Ph.D., California, Los Angeles, 1965.
Robert S. Freeman, Ph.D., Associate Professor of Mathematics (partial differential equations, operator theory). B.A.E., New York University, 1947; Ph.D., California, Berkeley, 1958.
David K. Harrison, Pl.D., Professor of Mathematics (algebra). B.A., Williams, 1953 ; Ph.D., Princeton, 1956.
Alan R. Hoffer, Ph.D., Associate Professor of Mathematics (geometry, mathematics education). B.A.,
California, Los Angeles, 1958; M.S.,
Notre Dame, 1963 ; Ph.D., Michigan, 1969.

William Kantor, Plı.D., Professor of Mathematics (finite geometries, finite groups, combinatorics). B.S., Brooklyn College, 1964 ; M.A., 1965, Ph.D., 1968, Wisconsin.
Richard M. Koch, Ph.D., Associate Professor of Mathematics (differential geometry). B.A., Harvard, 1961 ; Ph.D., Princeton, 1964.
John V. Leahy, Ph.D., Associate Professor of Mathematics (algebraic and differential geometry). Ph.D., Pennsylvania, 1965.

Henry L. Loeb, Ph.D., Professor of Mathematics (numerical analysis, approximation theory). B.S., Wiscon$\sin , 1949$; M.A., Columbia, 1958 ; Ph.D., California, Los Angeles, 1965.
Eugene A. Maier, Ph.D., Professor of Mathematics (number theory, mathematics education). B.A., 1950, M.A., 1951, Ph.D., 1954, Oregon.
Kenneth G. Miller, Ph.D., Assistant Professor of Mathematics (partial differential equations). B.A., Macalester College, 1969 ; S.M., 1970, Ph.D., 1975, Chicago.
Ivan M. Niven, Ph.D., Professor of Mathematics (number theory). B.A., 1934, M.A., 1936, British Columbia; Ph.D., Chicago, 1938.
Paul Olum, Ph.D., Professor of Mathematics (algebraic topology), Vice-
President for Academic Affairs and Provost. A.B., Harvard, 1940 ; M.A., Princeton, 1942 ; Ph.D., Harvard, 1947.

Theodore W. Palmer, Ph.D., Professor of Mathematics (analysis). B.A., 1958, M.A., 1958, Johns Hopkins ; A.M., 1959, Ph.D., 1966, Harvard.
Kenneth A. Ross, Ph.D., Professor of Mathematics (harmonic analysis). B.S., Utah, 1956 ; M.S., 1958, Ph.D., 1960, Washington.
Gary M. Seitz, Ph.D., Professor of Mathematics (group theory). A.B., 1964, M.A., 1965, California, Berkeley ; Ph.D., Oregon, 1968.
Peter R. Sherman, M.S., Senior Instructor in Mathematics (mathematics education). B.S., 1947, M.S., 1949, Oregon ; B.D., Pacific School of Religion, 1952.
Allan J. Sieradski, Ph.D., Associate Professor of Mathematics (algebraic topology, homotopy theory). B.S., Dayton, 1962 ; M.S., 1964, Ph.D., 1967, Michigan.
Robert T. Snythe, Ph.D., Associate Professor of Mathematics (probability). A.B., Oberlin, 1963 ; B.A., Oxford, 1965; Ph.D., Stanford, 1969.
Paul L. Speckman, Ph.D., Assistant Professor of Mathematics (statistics). B.A., 1969, M.A., 1973, Ph.D., 1976, California, Los Angeles.
Colin E. Sutherland, Ph.D., Assistant
Professor of Mathematics (operator algebras). B.Sc. (Honors), Canterbury, New Zealand, 1969 ; Ph.D., California, Los Angeles, 1973.
Robert F. Tate, Ph.D., Professor of Mathematics (statistics). B.A., California, Berkeley, 1944 ; M.S., North Carolina, 1949 ; Ph.D., California, Berkeley, 1952.

Donald R. Truax, Ph.D., Professor of Mathematics (statistics). B.S., 1951, M.S., 1953, Washington ; Ph.D., Stanford, 1955.
James M. Van Buskirk, Ph.D., Associate Professor of Mathematics (topology, knot theory). B.S., Wisconsin State, Superior, 1954 ; M.S., 1955, Ph.D., 1962, Wisconsin.
Marie A. Vitulli, Ph.D., Assistant Professor of Mathematics (algebraic geometry). B.A., Rochester, 1971 ; M.A., 1973, Ph.D., 1976, Pennsylvania. Lewis E. Ward, Jr., Ph.D., Professor of Mathematics (topology). A.B., California, Berkeley, 1949; M.S., 1951, Ph.D., 1953, Tulane.
Jerry M. Wolfe, Ph.D., Associate Professor of Mathematics (numerical analysis). B.S., Oregon State, 1966 ; M.A., 1969, Ph.D., 1972, Washington. Charles R. B. Wright, Ph.D., Professor of Mathematics (group theory). B.A., 1956, M.A., 1957, Nebraska ; Ph.D., Wisconsin, 1959.

## Faculty Emeriti

Kenneth S. Ghent, Ph.D., Professor Emeritus of Mathematics (number theory). B.A., McMaster, 1932 ; S.M., 1933, Ph.D., 1935, Chicago ; at Oregon since 1935.
Lulu V. Moursund, M.A., Instructor Emerita in Mathematics. Ph.B., 1929, M.A., 1930, Brown ; at Oregon 1956-57 and since 1961.

## Undergraduate Studies

Mathematics courses at the University are designed to satisfy the needs of students, majors and nonmajors, interested in mathematics primarily as part of a broad liberal education. They also provide basic mathematical and statistical training for students in the social, biological, and physical sciences and in the professional schools; prepare teachers of mathematics; and provide advanced and graduate work for students specializing in the field.
Preparation for Major Work. Students planning to major in mathematics at the University should take as much mathematics in high school as they can work into their programs. Courses in algebra, geometry, trigonometry, and more advanced topics should be included whether offered as separate courses or in unified form. Prospective mathematics majors should arrange with the Department of Mathematics to discuss their programs with an adviser at the earliest opportunity.

College transfer students who have completed a year of calculus by the time they enter the University should be able to complete the major requirements in mathematics in two additional years. Junior and community college students planning to major in mathematics who complete a year of calculus as freshmen should plan to transfer to the University at the beginning of the sophomore year.
Science Group Requirement. The department offers several one-term courses (Mth 124, 150, 151, 152, 153, $154,155,156,157$ ) and an Honors College sequence (Mth 190, 191, 192) specifically intended for students who do not necessarily plan to take advanced work in mathematics, but who wish to satisfy all or part of the science group requirement in mathematics. These courses present ideas from areas of important mathematical activity in an elementary setting, stressing concepts more than computation. They do not provide preparation for other mathematics courses, but are not incompatible with entering a calculus sequence.

Two sequences of calculus are offered. Calculus for the Nonphysical Sciences (Mth 207, 208, 209) is designed for students of the social sciences and managerial sciences. The first two terms (Mth 207, 208) provide a basic introduction to matrices and calculus suitable for many students in business and other fields. Calculus (Mth $201,202,203$ ) is the standard sequence recommended to most students in the physical sciences and mathematics. Mathematics majors and other students with high aptitude for mathematics are advised to take Theory of Calculus (Mth 210, 211, 212) along with Mth 201, 202, 203 . Elements of Discrete Mathematics (Mth 231, 232, 233) provides an introduction to concepts that are needed in computer science and other areas.
Students may not enroll for credit in courses that are prerequisite to those in which they are concurrently enrolled or for which credit has been received.
Major Programs. The department offers undergraduate preparation for graduate work in mathematics and statistics, for mathematics teaching at the secondary level, and for positions in government, business, and industry requiring mathematical training. Each mathematics major's program is individually constructed in consultation with an adviser.

Students who have advanced placement credit in calculus may skip some terms of the calculus sequence or, in some cases, start upper-division work at once. Theory of Calculus (Mth 210,

211,212 ), taken concurrently with the year of calculus, is recommended for all majors and for other students with substantial interest and aptitude in mathematics. Majors whose high school preparation does not qualify them to begin calculus must make up their deficiencies by enrolling in the appropriate calculus-preparatory courses.

## Requirements for Baccalaureate Degree

To qualify for a baccalaureate degree with a major in mathematics, a student must satisfy the requirements listed in one of the seven options below. The upper-division courses used to satisfy these requirements must be graded (as opposed to P-NP). At least twelve credit hours in upper-division mathematics courses must be taken in residence.

Option One: Graduate Preparatory
Required: 36 upper-division mathematics credits (exclusive of Mth 425 , 426,427 ), including Mth 331, 332, 333 ; Mth 321 or Mth 212 ; Mth 412 and at least two terms selected from one sequence and two terms selected from another sequence in the following sets : Mth 413, Mth 414, Mth 415, 416; Mth 431, 432; Mth 437, 438, 439; Mth 447, 448, 449.

Recommended: Mth 421, 422 ; Mth 461 ; Mth 462.

Mathematics majors using this option should seriously consider taking graduate courses as well.

## Option Two: With Emphasis in Statistics

Required: 36 upper-division mathematics credits (exclusive of Mth 425, 426, 427), including Mth 331, 332, 333 ; Mth 321 or Mth 212; Mth 412 ; Mth 417 and either Mth 441, 442 ; Mth 443 ; Mth 444 ; or Mth 447, 448, 449.

Recommended: Mth 428, 429, 430; and CS 201, 202, 203.

Note: Students planning graduate work in statistics are urged to take Mth 447, 448, 449 and Mth 431, 432.
Option Three: With Emphasis in Physical Sciences

Required: 34 upper-division mathematics credits (exclusive of Mth 425 , 426, 427), including Mth $331,332,333$; Mth 321 or Mth 212 ; Mth 412 and at least five terms selected from among Mth 421, 422; Mth 428, 429, 430; Mth 441, 442; Mth 443; Mth 461; Mth 462; Mth 465 ; Mth 466; Mth 467.

Also required: any two of the following three sets of sequences-Ch 204, 205, 206 or Ch 104, 105, 106 ; Geol 201, 202, 203 or Geol 101, 102, 103 ; Ph 201, 202, 203 or $\mathrm{Ph} 211,212,213$. An
upper-division three-term sequence in chemistry, geology, or physics may be substituted for one of these sequences.

Recommended: Mth 417 ; Mth 418, 419; Mth 431, 432 ; Mth 444 ; Ph 324, 325, 326; Ph 421, 422, 423 ; Ph 441, 442, 443; Ch 441, 442, 443; Geol 463.

## Option Four: With Emphasis in Computer Science

Required: 36 upper-division mathematics credits (exclusive of Mth 425, 426, 427), including Mth 331, 332, 333 ; Mth 321 or Mth 212 ; Mth 412 and either Mth 428, 429, 430 or Mth 417, Mth 418, 419.

Also required: $\operatorname{CS} 301,302,303$.
Recommended: Mth 441, 442 ; Mth 443 ; Mth 465.

## Option Five: With Emphasis in

 Social Science or BusinessRequired: 36 upper-division mathematics credits (exclusive of Mth 425, 426, 427), including Mth 331, 332, 333 ; Mth 321 or Mth 212; Mth 412; Mth 417 ; Mth 441, 442 ; Mth 443.

Recommended: Mth 354,355 ; Mth 418, 419; Mth 428, 429, 430; Mth 437, 438, 439 ; Mth 444 ; Mth 454, 455 ; Mth 461 ; Mth 462 ; Ec 494, 495 ; Psy 433 ; QM 432. Since this emphasis covers such diverse areas, it is essential for students to obtain explicit guidance from a mathematics adviser and an adviser in one of the social science departments or the College of Business.

## Option Six: With Emphasis in <br> Biological Sciences

Required: 28 upper-division mathematics credits (exclusive of M th 425 , 426, 427), including Mth 331, 332, 333; Mth 321 or Mth 212 ; Mth 412 ; Mth 441, 442 ; Mth 461.

Also required: $\mathrm{Ch} 204,205,206$ or Ch 104, 105, 106; Ph 201, 202, 203 or Ph 211, 212, 213 ; and Bi 304 ; $\operatorname{Bi} 305$; Bi 307.

Recommended: Mth 413 ; Mth 417 ; Mth 428, 429, 430; Mth 443; Mth 444 ; Mth 450, 451 ; Mth 462; Mth 465 ; Mth 466; CS 201, 202, 203; Bi 422; Bi 424 ; Bi 470; Bi 471; Bi 472 ; $\operatorname{Bi} 473$.

## Option Seven: With Emphasis in Secondary Teaching

Required: 30 upper-division mathematics credits (exclusive of Mth 425 , 426,427 ) including Mth 321 or Mth 212 ; Mth 341, 342, 343 ; Mth 344 , 345 ; Mth 346 ; Mth 411 or Mth 333.

Also required: CS 133 or CS 201 and at least 18 credit hours in education courses which apply toward the Oregon Basic Teaching Certificate.

Recommended: Mth 328 ; Mth 354, 355.

Regular session courses with similar content and special upper-division and
graduate courses offered during summer session may be approved by the departmental teacher education committee as acceptable substitutes for these courses. Prospective teachers should plan to do student teaching during a term which does not conflict with the required mathematics courses.
Secondary School Teaching of Mathematics. For certification as a teacher of mathematics in Oregon high schools, the Teacher Standards and Practices Commission requires completion of an approved teacher education program. For an unrestricted endorsement in mathematics, the approved program includes (1) the requirements of a major in mathematics under option seven, (2) certain requirements in professional education, and (3) the recommendation of the institution at which the student completes the preparation. For additional details, consult the norm adviser for teacher education in the Department of Mathematics and the Office of Secondary Education in the College of Education.

The University will recommend for the Standard Teaching Certificate and Standard endorsement upon successful completion of a planned program of advanced teacher education ; this plan must be filed with the Office of Teacher Certification in the College of Education at the time the work is initiated. Completion of work required for a master's degree does not satisfy requirements for either the Standard Teaching Certificate or endorsement, unless the degree work also includes certificate and endorsement requirements. Program planning forms and information relating to the University's Standard teacher education program may be secured from the Office of Teacher Certification.
Elementary School Teaching of Mathematics. For certification to teach in an elementary school in Oregon, the Oregon Teacher Standards and Practices Commission requires demonstrated competence in mathematics. This requirement may be fulfilled by satisfactorily completing the third term of the sequence Mathematics for Elementary Teachers (Mth 121, 122, 123).
The state will recognize as a Mathematics Specialist one who chooses mathematics as the area of concentration required by the University for elementary school certification. The mathematics requirement for concentration consists of twelve credit hours in mathematics courses numbered above 123, excluding Mth 199. A suggested program consists of at least four courses selected from Mth 150, 151, 152, 153, $154,155,156,157$.

Exact mininum certification requirements are available from the College of Education.

Other Information. Students wanting to graduate "with honors in mathematics" should notify the chairman of the Undergraduate Affairs Committee not later than the first term of their senior year. They must complete two of the four sets of sequences Mth 413, Mth 414, (or Mth 415, 416) ; Mth 431, 432; Mth 437, 438, 439 ; Mtl 447, 448, 449 ; with an average grade of $B$ or higher. They must also write a thesis covering advanced topics assigned by their adviser. The honors degree will be awarded those whose work is judged truly exceptional.

The William Lowell Putnam examination, a competitive, nationally adninistered mathennatics exam, is given early each December; it contains twelve very challenging problems, with prizes awarded the top finishers in the nation. Those interested should consult the chairman of the Undergraduate Affairs Committee at the beginning of the fall term.

There is an undergraduate lounge in Deady Hall, equipped with tables, blackboards, and a collection of mathematics books and periodicals.

## Graduate Studies

The University offers graduate work in mathematics leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees.

Two basic curricula are available for the M.S. and M.A. programs, one designed for persons intending to terminate their study of mathematics with a master's degree, and the other designed for those intending to continue work toward the Ph.D.

Coordinated master's degree programs are also offered for the training of secondary-school and communitycollege teachers of mathematics which terminate with an M.S. or M.A. in mathematics or interdisciplinary studies. These programs may be pursued during summer sessions as well as in regular sessions. Applicants for a summers-only admission are exempt from the enrollment limitations in force during the academic year, but must otherwise satisfy the admissions requirements.

The department offers programs leading to the Ph.D. degree in the following areas: algebra, analysis, applied mathematics, combinatorics, differential equations, geometry, number theory, numerical analysis, probability, statistics, and topology.

The numbler of new graduate students that can be admitted each academic year into the departmental programs is limited. Admission is dependent upon the student's previous academic record, as to both overall academic quality and adequate mathematical background for the applicant's proposed degree progran. Application forms for admission to the Graduate School may be obtained by writing to the head of the Department of Mathematics. Prospective applicants should note also the general University requirements for graduate admission which appear in the Graduate School section of this catalog.
In addition to transcripts from all undergraduate and graduate institutions attended, copies of Graduate Record Examination scores in the "Verbal," "Quantitative" and "Advanced Mathematics" tests should be subnitted to the Department of Mathematics.
In addition to the general requirements of the Graduate School, the specific course requirements and conditions to be fulfilled in the graduatedegree programs are shown below.

## Pre-Ph.D. Master's Program

(1) Of the required 45 credit hours, at least 18 must be mathematics courses in the 500 level; at most, 15 may be in graduate level courses other than mathematics.
(2) Students should take at least one sequence from each of the following groups: (a) Mth 551, 552, 553; Mth 554, 555, 556; (b) Mth 521, 522, 523; Mth 534, 535, 536 ; Mth 541, 542, 543 ; Mth 571, 572, 573; Mth 581, 582, 583; Mth 507 (seminars) in Differential Geometry or Number Theory or any two fromi Mth 412, Mth 413, Mth 414 or Mtl1 412, Mth 415, 416; Mth 437, 438; Mth 447, 448, 449; Mth 454, 455, 456 ; Mth 487, 488, 489; (c) Another 500 -level sequence, which may be selected from (a) or (b) except that the sequence topic may not duplicate that of any 400 -level sequence used to satisfy requirements.

## Terminal Master's Program

(1) Of the required 45 credit hours, at least 9 must be mathematics courses in the 500 level, excluding Mth 505 ; at most, 15 may be in graduate level courses other than mathematics.
(2) Students should take a minimum of two of the following sequences and one 500 -level sequence, or two 500 -level sequences and one of the following: Mth 412, Mth 413, Mth 414 or Mth 412, Mth 415, 416; Mth 431, 432; Mth

437, 438; Mth 447, 448, 449; Mth 454, 455, 456.
(3) Students should have taken, at some time, a year upper-division or graduate course in statistics, numerical analysis, computing, or other applied mathematics.

## Teacher's Master's Program

(1) Of the required 45 credit hours, at least 9 must be mathematics courses in the 500 level.
(2) Students must take at least 36 credit hours in mathematics courses of either 400 (G) or 500 -level, or both, to include the following or their equivalents: (a) Mth 412, Mth 413, Mth 414 or Mth 412, Mth 415, 416; (b) Mth 431, 432; (c) Two terms from one of the following : Mth 437, 438; Mth 447, 448, 449; Mth 454, 455, 456; Mth 487, 488, 489; Mth 534, 535, 536.
(3) Students should have taken, at some time, a one-term or longer course in both Introductory Linear Algebra and Set Theory and Mathematical Logic, and one from Differential Equations, or Functions of Several Variables.

## Interdisciplinary Studies, Teaching, Mathematics

(1) Of the required 45 credit hours, at least 9 must be in 500 -level courses.
(2) Students must take a minimum of 9 credit hours of planned graduate education, and 36 credit hours of planned graduate mathematics courses ( $400 \mathrm{~g}, 400 \mathrm{G}$ and 500 levels).
(3) Planned courses are selected and approved at the start of the program of study, and may not be altered except with permission of the student's adviser.

## Doctor of Philosophy

The Ph.D. is a degree of quality not to be conferred in routine fashion after completion of any specific number of courses or after attendance in Graduate School for a given number of years.

Each student, upon entering the gradwate program in mathematics, will review previous studies and objectives with the Graduate Advising Committee. On the basis of this consultation, tentative admittance to the Master's Program or the Pre-Ph.D. Program will be granted. A student in the PrePh.D. Program may also be a candidate for the Master's Degree.
(1) The Pre-Ph.D. Program. In order to be adnitted to the Pre-Ph.D.
Progran, an entering graduate student must have completed a course of study substantially equivalent to an Oregon

Option One : Graduate Preparatory undergraduate mathematics major. Other students will be placed in the Master's Program ; they may apply for admittance to the Pre-Ph.D. Program following a year of graduate study. Students in the Pre-Ph.D. Program must take the Qualifying Examination given a week or two following Spring term. The Qualifying Examination consists of examinations on two basic 500 -level graduate courses, one from each of two of the following three categories: (a) Algebra, (b) Real Analysis, (c) Complex Analysis, Numerical Analysis, Probability, Statistics or Topology.
(2) The Ph.D. Program. Admission to the Ph.D. Program is based upon the following criteria : satisfactory performance on the Qualifying Examination, completion of three courses at a level commensurate with study towards a Ph.D., and satisfactory performance in seminars or other courses taken as a part of the Pre-Ph.D. or Ph.D. Programs. Students who are not admitted to the Ph.D. Program because of unsatisfactory performance on the Spring term Qualifying Examination may take the Qualifying Examination which is administered just prior to the next Fall term.

A student in the Ph.D. Program is advanced to candidacy after passing two language examinations and the Preliminary Examination. To complete the requirements for the Ph.D., candidates must submit a thesis, have it read and approved by a dissertation committee, and defend the thesis orally in a formal public meeting.
(3) Language Examinations. The department expects Ph.D. candidates to be able to read mathematical material in two foreign languages selected from French, German, or Russian. (Alternative languages are acceptable in certain fields.) Language requirements may be fulfilled by: (a) passing a departmentally administered exam; (b) satisfactory completion of a second-year college-level language course ; or (c) passing an ETS exam.
(4) Preliminary Examination. This is an oral examination emphasizing the basic material in the student's general area of interest. A student is required to take this examination during the first three years in the combined Pre-Ph.D. and Ph.D. Programs. A student is not eligible to take this examination until after completion of the language examinations and substantially all of the course work needed for the Ph.D.
(5) Dissertation. Ph.D. candidates in mathematics must submit a dissertation
containing substantial original work in mathematics.
(6) Final Defense of Thesis. There are no requirements in mathematics other than those of the Graduate School.

## Undergraduate Courses

Mth 95. Intermediate Algebra. 4 credit
hours. Fundamentals of algebra. Intended for students entering with less than two years of high school algebra; not open for credit to students entering with four years of high school mathematics including trigonometry.
Mth 101. College Algebra. 4 credit hours. Intended as preparation for other mathematics courses when recommended by entrance placement, or to satisfy major requirements in other departments. Prerequisite : one and one-half years of high school algebra, or Mth 95.
Mth 102. Elementary Functions. 4 credit hours. Trigonometric, logarithmic, and exponential functions and their graphs. Intended as preparation for Mth 201. Prerequisite : Mth 101 , or equivalent.
Mth 115. Preparation for Calculus. 4 credit hours. Selected topics from algebra, trigonometry, and other areas. For entering students who have had a considerable amount of high school mathematics, including trigonometry, and whose placement scores indicate a need for a brief course in pre-calculus mathematics. Consent of department is required.
Mth 121, 122, 123. Mathematics for Elementary Teachers. 3 credit hours each term. Basic concepts of arithmetic, elementary algebra, and elementary geometry. Emphasis on the real number system and deductive processes within the system. Open only to prospective elementary teachers.
Mth 124. Mathematics of Finance. 4 credit hours. Simple and compound interest and discount annuities, periodic-payment plans, bonds, depreciation, mathematics of insurance, and other topics related to business. Prerequisite : Mth 101, or equivalent.
Mth 150. Introduction to Probability. 3 credit hours. An elementary sur vey emphasizing basic concepts, with application to problems in many fields. Not open to students with credit for Mth 232. Prerequisite : Mth 95 or two years of high school algebra or entrance placement for Mth 101.
Mth 151. Combinatorics. 3 credit hours. Study of counting problems where simple enumeration is impractical. Permutations, networks. Interesting historical problems. Applications to economics, statistics, and computer programming. Not open to students with credit for Mth 232. Prerequisite : Mth 95, or two years of high school algebra, or entrance placement for Mth 101.
Mth 152. Mathematical Symmetry. 3 credit hours. An introduction to the common mathematical symmetry properties of objects occurring in architecture, art, and the natural sciences; reflections and rotations; the concept of a group of symmetries. Prerequisite : one year of high school geometry and Mth 95, or two years of high school algebra, or entrance placement for Mth 101.
Mth 153. Introduction to Game Theory. 3 credit hours. Introduction to the theory of games of strategy. A study of decision-making in situations where the outcome is affected by the participants in a competitive environment. Restricted to games with two participants where the gains of one are the losses of the
other. Prerequisite : Mth 95, or two years of high school algebra, or entrance placement for Mth 101.

Mth 154. Mathematical Milestones. 3 credit hours. An examination of several major mathematical discoveries of the 18th and 19th centuries with emphasis on particular results rather than on the overall flow of history. Prerequisite: one term of 100 level mathematics, or consent of department.
Mth 155. Maximum and Minimum Problems. 3 credit hours. The use of inequalities to determine maximum and minimum values in arithmetic, algebra and geometry. Prerequisite: Mth 101, or equivalent.
Mth 156. Concepts of Statistics. 3 credit hours. Fundamental ideas of statistics, with illustrative examples. Particular attention to correct problem formulation and correct use of definitions and notation. Intended to expose features of modern statistical thinking in a mathematically elementary atmosphere. Primarily for lower-division students. Prerequisite: Mth 95, or two years of high school algebra, or entrance placement for Mth 101.
Mth 157. Elementary Theory of Numbers. 3 credit hours. Introduction to elementary, basic properties of whole numbers. Topics include prime numbers, congruences, Fermat's theorem, equations in integers, irrational numbers, and famous unsolved problems. Prerequisite : Mth 95, or two years of high school algebra, or entrance placement for Mth 101.
Mth 190, 191, 192. Topics in Modern Mathematics (Honors College). 4 credit hours each term. Selected topics chosen to illustrate mathematical thought and application of mathematics to contemporary problems Does not provide preparation for calculus. Prerequisite : one and one-half years of high school algebra, or Mth 95.
Mth 199. Special Studies. 1-3 credit hours.
Mth 201, 202, 203. Calculus. 4 credit hours each term. Standard sequence for students of physical, biological, and social sciences, and mathematics. Prerequisite : high school trigonometry and a high placement score ; or Mth 115 ; or Mth 102 . Not open to students who have credit for M th 207, 208, 209.
Mth 207, 208, 209. Calculus for the Nonphysical Sciences. 4 credit hours each term. Vectors and matrices, differential and integral calculus, introduction to several variable calculus and differential equations. This calculus sequence is designed for students of the social sciences and managerial sciences. Mathematics students and students of the physical sciences should not take this sequence ; they should take M th 201, 202, 203. Students anticipating later taking Mth 331, 332, 333 should take Mth 201, 202, 203. Prerequisite: Mth 101 or equivalent. Not open to students who have credit for Mth 201, 202, 203.
Mth 210, 211, 212. Theory of Calculus. 2 credit hours each term. A rigorous treatment of the theoretical aspects of the calculus that are introduced and used in Mth 201, 202, 203 Related topics are also studied. For students with high aptitude for and interest in mathematics. Recommended for all mathematics majors. Intended for students concurrently enrolled in Mth 201, 202, 203.

## Mth 215. Topics from Calculus. 4 credit

 hours fall. The entering students whose calculus backgrounds include most but not all of a year of university calculus. Designed to produce a level of proficiency in calculus sufficient for upper-division mathematics courses. Consent of department is required.Mth 231, 232, 233. Elements of Discrete Mathematics. 4 credit hours each term. Set algebra, mappings and relations. Truth tables. Elements of graph theory, combinatorics, probability, vectors and matrices. Semigroups and groups. Axiomatic mathematical logic, predicate calculus, decidability, transfinite numbers. Does not provide preparation for calculus. Prerequisite : M th 101, or equivalent.
Mth 321. Elementary Analysis. 4 credit hours. A rigorous treatment of certain topics introduced in calculus, including continuity and differentiation, sequences and series, uniform convergence and continuity. Prerequisite : year sequence in calculus. Not open to students who have credit in Mth 212.
Mth 328. Number Theory. 3 credit hours. Divisibility, congruences, number theoretic functions, Diophantine equations. Prerequisite : year sequence in calculus, or consent of instructor.
Mth 331, 332, 333. Calculus of Several Variables with Linear Algebra. 4 credit hours each term. Calculus of functions of several variables from a vector viewpoint, including partial differentiation, the gradient, divergence and curl, Lagrange multipliers, multiple integration, line and surface integrals, Green's theorem, Stoke's theorem, Gauss' theorem. Mth 333 also includes an introduction to linear algebra: computational vector and matrix algebra, n-dimensional vector spaces, systems of linear equations, linear maps, eigenvalues, rank, nullity, determinants. This sequence covers the material in Mth 411 and students will not get credit for both Mth 333 and Mth 411. Prerequisite : Mth 203 or consent of instructor.
Mth 341, 342, 343. Fundamentals of Algebra. 3 credit hours each term. An introduction to algebraic structures including groups, rings, fields and polynomial rings. Prerequisite : year sequence in calculus, or consent of instructor.
Mth 344, 345. Fundamentals of Geometry. 3 credit hours each term. Geometric transformations. Length, area, volume, and the related limit problem. Ruler and compass constructions, locus problems. Euclidean and non-Euclidean geometries. Coordinate and noncoordinate techniques in the plane and in space. Prerequisite : year sequence in calculus, or consent of instructor.
Mth 346. Fundamentals of Statistics. 3 credit hours. Topics in probability and statistics for prospective secondary school teachers of mathematics. Probability and random variables on finite sets. Binomial and hypergeometric distributions. Random number tables. Frequency distributions and histograms. Algebra of elementary statistical distributions. Tests of hypotheses and linear estimates. Prerequisite : year sequence in calculus, or consent of instructor.
Mth 354, 355. Mathematical Logic and Set Theory. 3 credit hours each term. Basic concepts of mathematical logic and set theory, propositional calculus, predicate calculus, algebra of sets, functions and relations, cardinal numbers, ordinal numbers, point sets on the real line. Prerequisite : year sequence in calculus, or consent of instructor.
Mth 403. Thesis. Credit hours to be arranged. Mth 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

Mth 407. Seminar. (g) Credit hours to be arranged.

Mth 407. Seminar. (G) Credit hours to be arranged.
Mth 410. Experimental Course. (G) Topics and credit hours to be arranged.
Mth 411. Introductory Linear Algebra. (g) 3 credit hours. Computational vector and matrix algebra; n-dimensional vector spaces ; systems of linear equations ; linear maps; rank, nullity ; determinants. Applications. Prerequisite : two quarters of calculus or consent of instructor. Not open to students who have credit for Mth 333.
Mth 412. Linear Algebra. (G) 3 credit hours. This course covers the materials of Mth 411 from a theoretical point of view, and provides an introduction to advanced work in algebra (see Mth 413 or Mth 415). Theory of linear dependence ; bases and dimensions; linear transformations and matrices; vector spaces with an inner product ; theory of determinants. Other topics as time permits. Prerequisite: Mth 333 or Mth 411 or consent of instructor.
Mth 413. Topics in Linear Algebra. (G) 3 credit hours. Continuation of Mth 412. Characteristic roots and vectors ; the minimal and characteristic polynomials ; the Jordan canonical form ; bilinear, quadratic and hermitian forms. The principal axis theorem; orthogonal, unitary and symmetric transformations. Connections with analysis and geometry. Prerequisite : Mth 412 or consent of instructor.
Mth 414. Algebraic Structures. (G) 3 credit hours. Introduction to the theory of groups, rings, fields. Prerequisite : Mth 413. Not open to students with credit for Mth 415 or 416.
Mth 415, 416. Introduction to Abstract Algebra. (G) 3 credit hours each term. Introduction to the theory of groups, rings, fields, polynomial rings. Specific topics as time permits. Prerequisite : Mth 412, or consent of instructor.
Mth 417. Applied Linear Algebra. (g) 3 credit hours. Linear inequalities and convex sets in Euclidean space. Linear programming with applications to economic models, transportation problems, game theory. Stochastic matrices with applications to Markov processes, random walks. Prerequisite : Mth 333 or Mth 411.
Mth 418, 419. Applied Algebra. (g) 3 credit hours each term. Modular arithmetic, elementary properties of groups, polynomial ideals, finite fields. Construction of combinatorial designs and orthogonal Latin squares, algebraic coding theory. Prerequisite : Mth 333 or Mth 411.

## Mth 421, 422. Functions of a Complex

 Variable. (g) 3 credit hours each term. Complex numbers, linear fractional transformations, Cauchy-Riemann equations, Cauchy's theorem and applications, power series, residue theorem, contour integration, harmonic functions, conformal mapping, infinite products. Prerequisite: Mth 332, or consent of instructor.Mth 425, 426, 427. Elements of Statistical Methods. (g) 3 credit hours each term. A basic sequence in statistical methods; not intended for mathematics majors. Presentation of data ; sampling distributions ; tests of significance ; confidence intervals ; regression; analysis of variance ; correlation ; nonparametric statistics. Prerequisite : Mth 95, or equivalent.
Mth 428, 429, 430. Introduction to Numerical Analysis. (g) 3 credit hours each term. Methods of numerical analysis with applications. Elementary theory for numerical solutions of differential equations, splines, and fast

Fourier transform. Prerequisite: Mth 212 or Mth 321 ; CS 201. (Mth 321 may be taken concurrently with Mth 428.)
Mth 431, 432. Introduction to Analysis. (G) 3 credit hours each term. A rigorous treatment of advanced topics including Riemann-Stieltjes integral, metric spaces, sequences and series of functions, Weierstrass approximation theorem, Ascoli's theorem, fixed-point theorems, inverse and implicit function theorems. Prerequisite : Mth 212 or Mth 321; Mth 333 or Mth 411.
Mth 437, 438, 439. Introduction to Topology. (G) 3 credit hours each term. Elementary point-set topology with an introduction to combinatorial topology and homotopy. Prerequisite : an upper-division mathematics sequence or consent of instructor
Mth 441, 442. Introduction to Statistical Theory. (g) 3 credit hours each term. Elementary theory of probability, sampling distributions, estimation and testing of hypotheses. Prerequisite : year sequence in calculus.
Mth 443. Regression Analysis and Analysis of Variance. (g) 3 credit hours. Least squares, simple linear regression, multiple regression, model-1 analysis of variance as an example of regression, orthogonal polynomials, nonlinear regression, adaptation of regression problems for computer programming. Prerequisite : Mth 442.
Mth 444. Nonparametric Statistics. (g) 3 credit hours. Statistical procedures valid under minimal assumptions; theory of rank order tests ; sign test, Wilcoxon test, k-sample tests for independent and matched samples; tests for randomness and goodness of fit ; comparison of tests including large sample power and efficiency; estimation based on order statistics; robust methods of inference in linear models. Prerequisite : Mth 442.
Mth 447, 448, 449. Mathematical Statistics. (G) 3 credit hours each term. Probability theory and applications to the derivation of sampling distributions ; best unbiased estimates ; properties of maximum likelihood estimates; Neyman-Pearson theory of testing hypotheses; likelihood ratio tests. Prerequisite : M.th 331, 332,333, or consent of instructor.
Mth 450, 451. Statistical Design and Analysis of Experiments. (G) 3 credit hours each term. Linear models and analysis of variance, factorial designs, incomplete and partially balanced designs, response surfaces, existence of various designs. Prerequisite : Mth 442, and Mth 333 or Mth 411.
Mth 454, 455, 456. Discrete Probability Theory and Applications. (G) 3 credit hours each term. Discrete sample spaces combinatorial analysis, limit theorems for discrete random variables, recurrent events, Markov chains, nonmeasure-theoretic treatment of simple stochastic processes, applications. Prerequisite : year sequence in calculus, or consent of instructor.
Mth 461. Introduction to Differential Equations. (g) 3 credit hours. Linear differential equations, applications, series solutions of differential equations. Equivalent to Mth 418 offered prior to fall 1977. Prerequisite : year sequence in calculus.
Mth 462. Differential Equations. (g) 3 credit hours. Systems of equations, boundary value problems, Green's functions, special functions. Prerequisites: Mth 333 or Mth 411 ; Mth 461.

Mth 465. Fourier Series and Orthogonal Functions. (g) 3 credit hours. Orthogonal functions; mean convergence ; Fourier series,

Legendre polynomials ; Bessel functions. Applications to partial differential equations. Prerequisite : Mth 332.
Mth 466. Fourier and Laplace Integrals.
(g) 3 credit hours. Fourier and Laplace transforms and applications to partial differential equations. Prerequisite : Mth 332, or consent of instructor.

Mth 467. Topics in Applied Mathematics.
(g) 3 credit hours. Topics selected from: integral equations, distribution theory. Prerequisite : Mth 332, or consent of instructor.

Mth 487, 488, 489. Geometry. (G) 3-4 credit hours each term. Axiomatic development of absolute geometries from both the synthetic and metric points of view; Euclidean and Lobachevskian geometry; area theory; ruler and compass constructions; elements of projective geometry; subgeometries of projective geometry; geometric transformations. Intended primarily for secondary-school and prospective secondary-school mathematics teachers. Prerequisite : year sequence in calculus and senior or graduate standing, or consent of instructor. Not offered 1978-79.

## Graduate Courses

Mth 501. Research. Credit hours to be arranged. A no-grade course.

Mth 503. Thesis. Credit hours to be arranged. A no-grade course.
Mth 505. Reading and Conference. Credit hours to be arranged.

Mth 507. Seminar. Credit hours to be arranged.
Algebraic Geometry. Leahy, Vitulli.
Algebraic Topology. Dyer, Olum, Sieradski.
Applied Mathematics. Barrar.
Banach Algebras. Barnes, Palmer, Sutherland.
Combinatorics and Finite Geometry. Hoffer, Kantor.
Commutative Algebra. Ander'son, Harrison, Vitulli.
Differential Geometry. Koch, Leahy.
Groups and Representations. Curtis, Kantor,
Seitz, Sutherland, Wright.
Harmonic Analysis. Ross.
Homological Algebra. Anderson, Harrison, Vitulli.
Lie Algebras and Algebraic Groups, Curtis.
Noncommutative Rings. Anderson, Harrison
Number Theory. Niven.
Numerical Analysis. Loeb, Wolfe
Partial Differential Equations. Freeman, Miller.
Probability. Smythe, Truax.
Selected Topics for Mathematics Teachers.
Ghent, Hoffer, Maier.
Statistics. Andrews, Smythe, Speckman, Tate Truax.
Topics in Functional Analysis. Barnes, Civin, Palmer, Ross, Sutherlan.
Topology. Dyer, Olum, Sieradski,
Van Buskirk, Ward.
Mth 510. Experimental Course. Topics and credit hours to be arranged.

Mth 521, 522, 523. Partial Differential
Equations. 3 credit hours each term.
Cauchy-Kowalewsky theorem, first-order systems, classification of second-order equations, boundary-value problems for the Laplace and Poisson equations, initial value, and mixed problems for the heat and wave equations, cigenvalue problems. Prerequisite : Mth 431, 432 and Mth 333 or Mth 411 ; Mth 421 recommended.

Mth 531, 532, 533. Linear Analysis in Applied Mathematics. 3 credit hours each term. Topics selected from the theory of integral equations, calculus of variations, partial differential equations, boundary value problems, linear operators, integral transforms, spectral theor y distributions, eigenfunction expansions with applications. Of primary interest to physical science majors. Prerequisite : Mth 333, Mth 461, and Mth 421 or equivalent, or consent of instructor.
Mth 534, 535, 536. Numerical Analysis. 3 credit hours each term. Analysis of numerical methods for solving a variety of mathematical problems including the solution of linear and nonlinear equations, the computation of eigenvalues and eigenvectors, interpolation, integration, and the solution of differential equations; rates of convergence and numerical stability. Prerequisite : Mth 412, Mth 432, Mth 461, and an introductory course in numerical analysis, or consent of the instructor.

Mth 541, 542, 543. Abstract Algebra. 3 credit hours each term. Group theory, fields, Galois theory, algebraic numbers, matrices, rings, algebras.

Mth 544, 545, 546. Structure of Rings and Algebras. 3 credit hours each term. Topics selected from : rings with minimum condition, algebras over a commutative ring, rings without finiteness assumptions, and nonassociative rings and algebras.

Mth 547, 548, 549. Algebraic Number Theory. 3 credit hours each term. Algebraic, irrational, transcendental, and normal numbers ; approximation of algebraic and transcendental numbers by rationals.

Mth 551, 552, 553. Theory of Functions of a Real Variable. 3 credit hours each term. Measure and integration. Hilbert and Banach spaces, and related topics.
Mth 554, 555, 556. Theory of Functions of a Complex Variable. 3 credit hours each term. The theory of Cauchy, power series, contour integration, analytic continuation, entire functions, and related topics.
Mth 557, 558, 559. Topics in Classical Analysis. 3 credit hours each term. Fourier series, Fourier transforms, integral equations, linear operations in Hilbert space, spectral theory.
Mth 561, 562, 563. Modern Theories in Analysis. 3 credit hours each term. Measure theory, Banach spaces and algebras, analysis in topological groups; modern functional analysis, with emphasis on the connections with classical analysis and on applications to harmonic analysis.
Mth 571, 572, 573. Topology. 3 credit hours each term. General and point-set topalogy, introduction to algebraic topology.
Mth 581, 582, 583. Theory of Estimation and Testing Hypotheses. 3 credit hours each term. Uniformly most powerful tests ; unbiased tests ; invariant tests ; minimax tests ; the univariate and multivariate general linear. hypothesis. Minimum variance unbiased estimation; properties of maximum likelihood estimates, Bayes estimates, and minimax estimates.
Mth 584, 585, 586. Theory of Probability. 3 credit hours each term. Measure and integration, probability spaces, laws of large numbers, the central limit theory, conditioning martingales, random walks.

Mth 587, 588. Stochastic Processes. 3 credit hours each term.

Mth 591, 592, 593. Advanced Mathematical Statistics. 3 credit hours each term. Topics selected from: analysis of variance and design of experiments ; nonparametric statistics; multivariate analysis; large sample theory; sequential analysis.
Mth 594. Theory of Games. 3 credit hours. The theory of games, with special emphasis on zero-sum two-person games.
Mth 595, 596. Statistical Decision Theory. 3 credit hours each term. Statistical decision theory based on the theory of games; sequential decision theory ; comparison of experiments.

Courses Offered Only
in Summer Session
Mth 457, 458, 459. Foundations of Mathematics. (g) 2-4 credit hours each term.
Mth 468, 469. Probability and Statistics. (g) 2-4 credit hours each term.

Mth 478, 479. Algebra. (g) 2-4 credit hours each term.
Mth 498, 499. Analysis. (g) 2-4 credit hours each term.
Mth 579, 580. Algebra. 2-4 credit hours each term.
Mth 589. Geometry. 2-4 credit hours.
Mth 598, 599. Analysis. 2-4 credit hours each term.


## Philosophy

## Faculty

Don S. Levi, Ph.D., Department Head, Associate Professor of Philosophy (logic, philosophy of mathematics) B.A., Wisconsin, 1956 ; M.A., 1961, Ph.D., 1962, Harvard.
Henry A. Alexander, Jr., Ph.D., Associate Professor of Philosophy (epistemology, history of philosophy). B.A., Princeton, 1947 ; M.A., 1951, Ph.D., 1955, California, Berkeley.
William E. Davie, Ph.D., Assistant Professor of Philosophy (ethics, history of philosophy). B.A., Washington, 1964 ; Ph.D., California, Irvine, 1969.
Frank B. Ebersole, Ph.D., Professor of Philosophy (philosophy of language, philosophy of mind). A.B., Heidelberg, 1941 ; Ph.D., Chicago, 1947.
Robert T. Herbert, Ph.D., Associate Professor of Philosophy (aesthetics, philosophy of religion). B.A., 1952, M.A., 1954, Ph.D., 1962, Nebraska.

Cheyney C. Ryan, Ph.D., Assistant Professor of Philosophy (political philosophy, philosophy of social science). M.A., 1973, Ph.D., 1974, Boston University.
Arnulf Zueig, Ph.D., Professor of Philosophy (Kant, philosophy of law, history of philosoply). B.A., Rochester, 1952 ; Ph.D., Stanford, 1960.

## Faculty Emeriti

John Wisdom, M.A., Emeritus Professor of Philosophy (philosophical methods ). B.A., 1923, M.A., 1934, Cambridge.

## Undergraduate Studies

The Department of Philosophy offers many lower- and upper-division courses of interest to students in areas of concentration other than philosophy. A major program leading to either the Bachelor of Arts or Bachelor of Science degree is also available. Freshmen and transfer students planning to study philosophy should be prepared to read rather difficult prose, since virtually all courses in the department make use of primary rather than secondary sources. The ability to write precise, analytical, coherent essays is also an essential skill in most philosophy courses.
Major Requirements. The minimum major requirement is 45 credit hours of work in philosophy with grades of C or better, including 36 hours in upperdivision courses. The 45 -hour requirement must include any three terms from
the History of Ancient Philosophy (Phl 301, 302, 303) or the History of Modern Philosophy (Phl 304, 305, 306) ; Symbolic Logic ( $\mathrm{Phl} 461,462$ ) or History of Logic (Phl 455, 456) ; and 6 credit hours of courses on the the works of specific authors. Courses of study must be arranged in consultation with the undergraduate major adviser.

Honors. Any philosophy major may, by fulfilling the requirements described below, graduate "with honors." The requirements are as follows:
(1) Grade Point Average. To enter the program, the student must have a GPA of at least 3.5 in philosophy courses at the end of the junior year ; to complete the program the student must have a GPA of at least 3.5 in philosophy courses at the end of the senior year.
(2) Courses. Besides those courses required of all philosophy majors, a candidate for honors must take an additional six hours of the 45 credit hours in philosophy at the 400 level.
(3) Senior Thesis. The candidate must write an honors thesis under the guidance of a member of the philosophy faculty chosen as Thesis Adviser. The thesis must be a substantial piece of work, and may be a revised and expanded version of a term paper. The thesis requires approval of the Thesis Adviser only.

Upon fulfilling these requirements, the candidate is then approved for graduation with honors.

## Graduate Studies

The department offers a graduate program leading to the Master of Arts and Doctor of Philosophy degrees. The department's graduate offerings are intended to meet the needs of three classes of students : (1) those preparing to work for the Ph.D. in philosophy with a goal of teaching and research ; (2) those not intending to take further graduate work in philosophy after earning a master's degree ; (3) those interested in philosophy as part of a program with a major in some other department.

The department's graduate program offers the possibility of concentration in various areas of philosophy, e.g., ethics, theory of knowledge, philosophy of mind, metaphysics, aesthetics, legal philosophy, philosophy of language. Each student's graduate program is individually determined by consultation with an advisory committee. Advanced work in mathematical logic, phenome-
nology, and Oriental philosophy is not currently offered at Oregon.

Applicants for admission to graduate studies are asked to write a brief letter explaining their philosophical background and their specific philosophical interests, to help the department's Admissions Committee decide whether ours is the most appropriate philosophy department for the applicant's goals. Applicants are urged to read some of the publications of faculty members in the department in order to see the sort of work being done here.

In addition to the general University regulations governing graduate admission, which begin on page 26 , the Department of Philosophy also requires applicants to submit three confidential report forms completed by teachers (preferably philosophy professors) familiar with the applicant's academic background. The Graduate Record Examination is recommended, though it is not a formal requirement of admission. Applicants should write to the department, explaining their interest in graduate studies here, and requesting an application blank for admission. The first copy (green), and one complete set of transcripts, together with the ten dollar application fee should be sent to the Graduate Admissions Office, Emerald Hall. The other four copies of the application, along with another set of transcripts, should be forwarded to the Department of Philosophy. Confidential report forms should be sent directly to the department by the professors recommending the applicant.

Graduate assistantships are the only form of financial aid available in the philosophy department. An application form will normally be included with the application for admissions form.

## Undergraduate Courses

Phl 201. Elementary Ethics. 3 credit hours.
The philosophical study of morality, e.g., ethical relativism, the justification of moral judgments, the concepts of duty, right and wrong.
Phl 202. Introduction to Theory of Knowledge. 3 credit hours. Philosophical analysis of problems of knowledge, e.g., empiricism, rationalism, skepticism, the problems of a priori knowledge, perception, sense-data.
Phl 203. Introduction to Metaphysics. 3 credit hours. Some classical metaphysical problems, e.g., substance, universals, causality, mind and body, the nature and justification of metaphysical claims.
Phl 204. Introduction to Philosophy of Religion. 3 credit hours. Philosophical analysis and justification of religious claims and concepts, e.g., God, the soul, immortality.
Phl 205. Contemporary Moral Issues. 3 credit hours. Philosophical problems con-
nected with such topics as civil disobedience the morality of war, abortion, conscription, compensatory justice.
Phl 206. Science and Humanity. 3 credit hours. Philosophical problems concerning the nature of scientific explanation and its implications concerning the nature of humanity and human actions.
Phl 210. Free Will and Determinism. 3 credit hours. Philosophical investigation of such topics as behaviorism, fore-knowledge and free will, indeterminism and determinism, human action and responsibility.

## Phl 212. Existentialism. 3 credit hours.

The basic ideas of the Christian and atheistic divisions of the existentialist movement : reading of selected works of representative philosophers; some attention to precursors and to the general modern philosophical situation which has negatively generated the existentialist rebellion.
Phl 221. Elementary Logic. 3 credit hours. Introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.
Phl 222. Elementary Aesthetics. 3 credit hours. Study of aesthetic fact and value, and of the relation of aesthetic interest to other human interests, such as the moral, the intellectual, and the religious.

## Phl 301, 302, 303. History of Ancient

 Philosophy. 3 credit hours each term. Survey of the history of philosophy from the pre-Socratic through the medieval period, with particular attention to Plato and Aristotle.
## Ph1 304, 305, 306. History of Modern

 Philosophy. 3 credit hours each term. Survey of the history of western philosophy from Descartes through the 20th century.Phl 307, 308, 309. Social and Political Philosophy. 3 credit hours each term. A survey of the major social and political theor ies from Plato through Marx. Inquiry into such ideas as justice, natural law, natural rights, and the social contract. Not offered 1978-79.

## Ph1 321, 322. Theory of Knowledge. 3

 credit hours each term. A study of the source, certainty, and limits of human knowledge as well as the ground and nature of belief. Rationalism, empiricism, and skepticism. Theories of perception. The problem of abstraction. The nature of truth. Prerequisite : one previous course in philosophy. Offered alternate years.Phl 323, 324. Ethics. 3 credit hours each term. Study of the most important traditional ethical theories; modern philosophical analysis of moral terms and statements. Prerequisite : one previous course in philosophy.
Phl 325, 326. Philosophy of Language. 3 credit hours each term. Examination of philosophical theories of language and meaning; ideals and methods of clarification; definition analysis; philosophy as study of language. Selected readings. Prerequisite : one previous course in philosophy.
Phl 339, 340. Introduction to Philosophy of Science. 3 credit hours each term. Analysis of basic concepts of science such as "explanation," "chance," "causation," etc. Nature of mathematics and its relation to science. Prerequisite : one previous course in philosophy.
Phl 350, 351. Metaphysics. 3 credit hours each term. A critical treatment of traditional issues in metaphysics, selected from among such topics as substance, existence, time, causation, God, the nature of persons, the meaningfulness of metaphysics. Prerequisite : one previous course in philosophy. Not offered 1978-79. Offered alternate years.

Phl 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

Phl 407. Seminar. (G) Credit hours to be arranged.
Phl 411. Plato. (G) 3 credit hours. Analysis of Plato's major dialogues. Prerequisite : 9 credit hours in philosophy of instructor's consent. Offered alternate years.
Phl 413. Aristotle. (G) 3 credit hours.
Aristotle's major writings on theory of knowledge, metaphysics, and ethics. Prerequisite: 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 416. Descartes. (G) 3 credit hours. A study of Descartes' writings on method, knowledge, philosophy of mind, and metaphysics. Prerequisite: 9 credit hours in philosophy or instructor's consent. Offered alternate years. Not offered 1978-79.
Ph1 419. Locke. (G) 3 credit hours. A study of Locke's account of knowledge, language, per sonal identity, substance, and his distinction between primary and secondary qualities. Offered alternate years. Prerequisite : 9 credit hours in philosophy or instructor's consent.
Phl 423. Leibniz. (G) 3 credit hours. A study of Leibniz's writings in logic and metaphysics. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years. Not offered 1978-79.
Phl 425. Berkeley. (G) 3 credit hours.
A study of Berkeley's major writings on knowledge and perception. Offered alternate years. Prerequisite : 9 credit hours in philosophy or instructor's consent.
Phl 427. Hume. (G) 3 credit hours. Hume's writings on knowledge, morals, and religion. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years. Not offered 1978-79.
Ph1 429, 430. (G) 3 credit hours each term. Kant's major writings in epistemology, ethics and the philosophy of religion : Critique of Purc Reason, Foundations of the Metaphysics of Morals, Critique of Practical Reason, Religion Within the Limits of Reason Alone. Offered alternate years. Prerequisite : 9 credit hours in philosophy or instructor's consent.
Phl 431, 432. Philosophy in Literature. (G) 3 credit hours each term. Selective study of major philosophical ideas and attitudes expressed in the literature of Europe and America. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years. Not offered 1978-79.
Phl 433, 434, 435. Advanced Ethics. (G) 3 credit hours each term. Classical problems and authors in moral philosophy and 20th century controversies in ethical theory, e.g., emotivism, the naturalistic fallacy, act and rule ultilitarianism, duty and supererogation. Prerequisite : 9 credit hours of philosophy or instructor's consent.
Phl 438. Kierkegaard. (G) 3 credit hours. An examination of Kierkegaard's major philosophical and polemical writings : Concluding Unscientific Postscript, Either/Or, The Sickness unto Death, The Attack on 'Christendom'. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years. Not offered 1978-79.
Phl 439, 440. Philosophy of Religion. (G) 3 credit hours each term. An intensive study of specific issues arising from reflection upon such topics as the nature of faith, proofs for
the existence of God, the nature of divine attributes, the problems of evil, and religious ethics. Prerequisite: 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 441, 442, 443. Aesthetics. (G) 3 credit hours each term. Systematic study of the meaning and value of aesthetic experience in everyday life and in the arts-painting, music, literature, etc. Prerequisite : 9 credit hours in philosophy or instructor's consent.
Phl 444. Philosophy of Law. (G) 3 credit hours. Theories of law and jurisprudence. Theories of guilt and punishment. Law and morality. The nature of legal reasoning. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 447, 448. Wittgenstein. (G) 3 credit hours each term. A study of Wittgenstein's Tractatus Logico-Philosophicus, Philosophical Investigations, and several minor works. Prerequisite: 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 453, 454. Analytic Philosophy. (G) 3 credit hours each term. A critical study of recent analytic philosophy, with special emphasis on the writings of the logical positivists and their predecessors and of contemporary British "linguistic" philosophers. Prerequisite: 9 credit hours in philosophy or instructor's consent.
Phl 455, 456. History of Logic. (G) 3 credit hours each term. A study of writers in the philosophy of logic : e.g., Plato, Ar ristotle, the Stoics, Ockham, Frege, Strawson. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 458, 459. Philosophy of Mind. (G) 3 credit hours each term. Analysis of some basic concepts of psychology, such as "mind" and "behavior": discussion of the mind-body problem and of methodological issues in psychology. Prerequisite : 9 credit hours in philosophy or instructor's consent.
Phl 461, 462. Symbolic Logic. (G) 3 credit hours each term. A consideration of the critical results of mathematical logic ; e.g., the completeness and undecidability of the predicate calculus, the essential incompleteness of elementary number theory, set and recursive function theory. No prerequisite. Offered alternate years.
Phl 463. Philosophy of Mathematics. (G) 3 credit hours. The status of mathematical theorems and formulas ; truth and falsity, necessity, justification in mathematics; Hilbert's program; Frege ; mathematics and the world. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years. Not offered 1978-79.
Phl 465. Logical Theory. (G) 3 credit hours. Formal and informal logic ; proof ; acceptability of logic: measuring, computing, formalizing and arguing. contradiction and paradox. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 468. Problems in Philosophy of Science. (G) 3 credit hours. Probability and statistics; the nature of scientific discovery; hypothetico-deductive systems ; the scope of science ; science and metaphysics. Prerequisite : 9 credit hours in philosophy or instructor's consent. Offered alternate years.
Phl 480, 481, 482. Philosophy of the Social Sciences. (G) 3 credit hours each term. Inquiry into the possibility of a science of society. Holism and methodological individualism ; behaviorialism; value-neutrality. Selected special topics, such as ideology, relativity of concepts, ethno-linguistics.

## Graduate Courses

Phl 501. Research. Credit hours to be arranged. A no-grade course.
Phl 503. Thesis. Credit hours to be arranged. A no-grade course.
Phl 505. Reading and Conference. Credit hours to be arranged.
Ph1 507. Seminar. Credit hours to be arranged.
Metaphysics.
Practical Reasoning.
Problems in the Philosophy of Language. Phl 511, 512, 513. Problems of Knowledge. 3 credit hours each term. Examination of attempts at philosophical analysis and justifications of knowledge ; perception, memory, induction, the self and other selves. Prerequisite: 9 credit hours in philosophy or consent of instructor.
Phl 514, 515, 516. Ethical Theory. 3 credit hours each term. An examination of contemporary ethical theory. Prerequisite : 9 credit hours in philosophy or consent of instructor. Offered alternate years.
Phl 517, 518. Problems in Philosophy of Language. 3 credit hours each term Analysis of current issues in the philosophy of language. Prerequisite : 9 credit hours in philosophy or consent of instructor. Offered alternate years.
Phl 523, 524. Problems in Philosophy of Mind. 3 credit hours each term. Examination of current literature on perception, action, intention, motives and causes, other minds. Prerequisite : 9 credit hours in philosophy or consent of instructor. Offered alternate years.


## Physics

## Faculty

Bernd Crasemann. Ph.D., Department Head, Professor of Physics (atomic and nuclear physics). A.B., California, Los Angeles, 1948 ; Ph.D., California, Berkeley, 1953.
Gregory O. Boeshaar, Pli.D., Assistant Professor of Astronony (observational astronomy, astrophysics ). B.S., Wittenberg University, 1967 ; Ph.D., Ohio State, 1977.
Patricia C. Boeshaar, Ph.D., Assistant Professor of Physics (astronomy). B.S., Northwestern State, Louisiana, 1969 ; Ph.D., Ohio State, 1976.
Paul L. Csonka, Ph.D., Professor of Physics (elementary particle theory). Ph.D., Johns Hopkins, 1963.
Nilendra G. Deshpande, Ph.D., Visiting Associate Professor of Physics (elementary particle theory). B.Sc., 1959, M.Sc., 1960, University of Madras; Ph.D., Pennsylvania, 1965.
Russell J. Donnelly, Ph.D., Professor of Physics (physics of fluids, superfluidity, astrophysics). B.Sc., 1951, M.Sc., 1952, McMaster University ; M.S., 1953, Ph.D., 1956, Yale.
Marvin D. Girardeau, Ph.D., Professor of Physics (many-body theory, statistical mechanics). B.S., Case Institute of Technology, 1952; M.S., Illinois, 1954 ; Ph.D., Syracuse, 1958.
Amit Gosvami, Ph.D., Professor of Physics (theoretical nuclear physics). M.Sc., 1960, Ph.D., 1964, Calcutta University.
Richard J. Higgins, Ph.D., Professor of Physics (solid state physics). B.S., Massachusetts Institute of Technology, 1960 ; Ph.D., Northwestern, 1965.
Rudolph C. Hwa, Ph.D., Professor of Physics (elementary particle theory). Director, Institute of Theoretical Science. B.S., 1952, M.S., 1953, Ph.D., 1957, (electrical engineering), Illinois; Ph.D., Brown, 1962.
Paul D. Ingalls, Ph.D., Visiting Assistant Professor of Physics (nuclear
physics). B.S., Washington, 1966;
Ph.D., Princeton, 1971.
James C. Kemp, Ph.D., Professor of Physics (astronomy). A.B., 1955, Ph.D., 1960, California.
Harlan W. Leferre, Ph.D., Professor of Physics (nuclear physics). B.A., Reed, 1951; M.S., Idaho, 1957 ; Ph.D., Wisconsin, 1961.
Douglas H. Lozendes, Ph.D., Associate Professor of Physics (solid state physics). B.S., Stanford, 1961 ; Ph.D., Colorado, 1968.

Brian W. Mattheres, Ph.D., Professor of Physics (protein crystallography). B.Sc., 1959, B.Sc., (Honors, 1st Class), 1960; Ph.D., 1963, University of Adelaide.
Joel W. McClure, Jr.., Ph.D., Professor of Physics (solid state theory). B.S., 1949, M.S., 1951, Northwestern ; Pl.D., Chicago, 1954.
David K. McDaniels, Ph.D., Professor of Physics (nuclear physics). B.S., Washington State, 1951 ; M.S., 1958, Ph.D., 1960, Washington.
Gerard F. Moseley, Plı.D., Associate Professor of Astronomy (radio astronomy). B.S., Randolph Macon College, 1962 ; M.S., 1964, Ph.D., 1969, Yale.
Michael J. Moravcsik, Ph.D., Professor of Physics (elementary particle theory). A.B., Harvard, 1951 ; Ph.D., Cornell, 1956.

Jack C. Overley, Ph.D., Associate Professor of Physics (nuclear physics). B.S., Massachusetts Institute of Technology, 1954 ; Ph.D., California Institute of Technology, 1960.
Kreangjai Park, Ph.D., Associate Professor of Physics (solid state physics). B.A., Harvard, 1958 ; Ph.D., California, 1965.

John L. Powell, Ph.D., Professor of Physics (theoretical phyics). B.A., Reed, 1943 ; Ph.D., Wisconsin, 1948.
George W. Rayfield, Ph.D., Associate Professor of Physics (biophysics, low temperature physics). B.S., Stanford, 1958; Ph.D., California, 1964.
Davison E. Soper, Ph.D., Assistant Professor of Physics (elementary particle theory). B.A., Amherst College, 1965, Ph.D., Stanford, 1971.
Pieter B. Visscher, Ph.D., Assistant Professor of Physics (solid state theory). B.A., Harvard, 1967 ; M.A., 1968, Ph.D., 1971, California, Berkeley.
Robert L. Zimmerman, Ph.D., Associate Professor of Physics (astrophysics, general relativity). B.A., Oregon, 1958; Ph.D., Washington, 1963.

## Faculty Emeriti

Shang-Yi Ch'en, Ph.D., Professor Emeritus of Physics (atomic spectroscopy). B.S., 1932, M.S., 1934, Yenching ; Ph.D., California Institute of Technology, 1940; at Oregon since 1949.

Edzein G. Ebbighausen, Ph.D., Professor Emeritus of Physics and Astronomy (astronomy). B.S., Minnesota, 1936; Ph.D., Chicago, 1940 ; at Oregon since 1946.

Gregory H. Wannier, Ph.D., Professor Emeritus of Physics (theoretical solid
state and atomic physics ). Ph.D., University of Basel, 1935 ; at Oregon 1959, and since 1961.

## Special Staff

Maut Hsiung Chen, Ph.D., Research Associate, Adjunct Assistant Professor of Physics (theoretical atomic physics), Ph.D., Oregon, 1972.
Yun Chung, Ph.D., Rèsearch Associate (low temperature physics), Ph.D., Oregon, 1975.
Gene E. Ice, Ph.D., Research Associate (atomic physics), Ph.D., Oregon, 1977.
Ilman Ju, Ph.D., Research Associate (elementary particle theory), Ph.D., Michigan, 1976.
Peter Kittel, Ph.D., Research Associate (superfluidity), Ph.D., Oxford, 1974. Philip. D. Mannheim, Ph.D., Research Associate, Adjunct Assistant Professor of Physics (many-body and quantum field theory), Ph.D., Weizman Institute, 1970.
Ira G. Nolt, Ph.D., Research Associate (infra-red astronomy), Ph.D., Cornell, 1967.

Richard M. Ostermeier, Ph.D., Research Associate, Adjunct Assistant Professor of Physics (air pollution), Ph.D., Chicago, 1973.
J. V. Radostitz, Research Associate (scientific instrumentation), Washburn School, 1960.

## Undergraduate Studies

Courses offered by the Department of Physics are intended for students embarked on professional careers in physics, for persons who wish to obtain a broad liberal arts education centered around a najor in physics, for major students in other science fields, for premedical and predental students, and for students planning to teach the physical sciences in the secondary schools.
Preparation for Entering Freshmen. Students planning to major in physics at the University should take as much mathematics in high school as possible. Students entering with insufficient preparation in mathematics must remedy their deficiences in elementary courses offered by the University. Substantial preparation in English and a foreign language is desirable. High school work in chemistry and physics is desirable but not required.
Preparation for Transfer Students. Students transferring from two-year colleges should be ready for upperdivision course work. They should have completed a year sequence in differen-
tial and integral calculus (other than Mth 207, 208, 209), General Physics ( $\mathrm{Ph} 201,202,203$ or $\mathrm{Ph} 211,212,213$ ), Introductory Physics Laboratory ( Ph $204,205,206$ ), or equivalent courses, and a year sequence in chemistry, including laboratory. In addition, they should have completed as many basic courses and group requirements as possible.

## Requirentents for a Baccalaureate

 Degree. Students may qualify for either a Bachelor of Arts or a Bachelor of Science degree.A physics major who satisfies the Arts and Letters group requirement without taking a foreign language will generally be entitled to a Bachelor of Science degree. However, physics majors who contemplate graduate work are urged to include at least one foreign language in their undergraduate program and qualify for a Bachelor of Arts degree, since proficiency in a foreign language is required by most graduate schools.

To qualify for a baccalaureate degree with a major in physics, a student must complete General Physics ( $\mathrm{Ph} 201,202$, 203 or $\mathrm{Ph} 211,212,213$ ), Introductory Physics Laboratory (Ph 204, 205, 206), and at least 24 credit hours in upper-division physics courses including Elements of Classical Physics (Ph $321,322,323$ ) or Classical Mechanics ( $\mathrm{Ph} 324,325,326$ ). (Courses numbered 400-409 may not be included in the 24 upper-division credit hours without explicit approval of the department.) All physics majors must complete a year sequence in differential and integral calculus (other than Mth $207,208,209$ ) and a year sequence in chemistry, including laboratory.

Students preparing for graduate work in physics should include in their programs: Electricity and Magnetism ( $\mathrm{Ph} 441,442,443$ ), Modern Physics ( $\mathrm{Ph} 421,422,423$ ), a year sequence in advanced calculus (Mth 331, 332, 333), and at least one additional upperdivision sequence in physics.

Honors Program in Physics. To qualify for a baccalaureate degree with honors in physics, a student must complete a total of four 400 -level three-term sequence physics courses, take all physics courses pass-clifferentiated (graded), and normally must have earned only grades of A and B in physics courses.
Secondary School Teaching. Certification as a teacher of science in Oregon public junior or senior high schools requires satisfactory completion of a program of teacher education which
includes subject matter preparation in the sciences and in professional education, plus the recommendation of the institution in which the preparation is completed. The Department of Physics offers work leading toward an Oregon teaching endorsement in specified science fields at the Basic and Standard certification levels, as determined by the Oregon Teacher Standards and Practices Commission. The University's programs to prepare science teachers are subject to revision to meet changes in certification requirements mandated by the Commission effective January 1, 1980. For specific information regarding requirements for one of the science teaching endorsements, students should contact the departmental endorsement adviser for teacher education, and the Office of Secondary Education in the College of Education.

## Graduate Studies

The Department of Physics offers a program of graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees, with a variety of opportunities for research. Research in the Department of Physics currently includes work in astrophysics and astronomy, atomic physics, biophysics, elementary particle theory, many-body theory, nuclear physics, solid state physics, statistical mechanics, superfluidity, and areas of applied physics. Cooperative programs are also possible in biophysics through the Institute of Molecular Biology, in the physical chemistry or chemical physics programs of the Department of Chemistry, or in geophysics programs of the Department of Chemistry, or in geoplysics through the Center for Volcanology of the Department of Geology.

Entering students should consult closely with their advisers. Students showing a lack of preparation are advised to take the necessary undergraduate courses, without graduate credit, to remedy their deficiency.
Admission. For admission as a graduate student, the student must meet minimum University requirements described in the Graduate School section of this catalog. Applicants must submit the following documents to the Department of Physics : one copy of their official application; one copy of transcripts of all prior academic work; three letters of reference from people well acquainted with the candidate's ability and recent work in physics.

Foreign students should also submit scores on the Graduate Record Examination, including the Advanced Test,

Physics category and the Test of English as a Foreign Language (TOEFL).
Master's Degree Requirements. Course requirements for a master's degree with a major in physics normally include, in addition to the substantial equivalent of the undergraduate physics degree, two three-term sequences in physics, at least one of which must be a 500 -level sequence; and one of the following sequences in mathematicsFourier Series and Orthogonal Functions, Fourier and Laplace Integrals, Topics in Applied Mathematics (Mth 465, 466, 467) ; Linear Analysis in Applied Mathematics (Mth 531,532,533) ; Functions of a Complex Variable (Mth 421,422 ), plus Mth 531 or another term of 400-level mathematics approved by the Director of Graduate Studies; Linear Algebra, Differential Equations (Mth 412, 413, 462) ; Numerical Analysis (Mth 428, 429, 430) ; Statistics and Regression Analysis (Mth 441, 442, 443) ; or three terms of 400 - or 500 -level mathematics approved by the Director of Graduate Studies before registration.
College Teacher Preparation. A substantial number of Oregon's graduate students intend to become college teachers. Most students acquire some teaching experience in the first year or two as teaching assistants. Students who want advanced experience may arrange a program of practice teaching supervised by physics faculty members, registering for credit in Ph 509 Supervised Tutoring Practicum.
Ph.D. Degree Requirements. The physics department has few course requirements, relying primarily on demonstrated competence in the Qualifying Examination, Comprehensive Examination, and doctoral thesis research. A course schedule is arrived at in individual conferences with an adviser. After making up any gaps in undergraduate ( 400 -level) background, the student generally prepares for the qualifying examination by taking graduate-level Quantum Mechanics ( $\mathrm{Ph} 531,532,533$ ), Theoretical Me chanics ( $\mathrm{Ph} 511,512,513$ ), and Electromagnetic Theory (Ph 521, 522, $523)$.

The Ph.D., Qualifying Examination covers undergraduate physics (mechanics, electricity and magnetism, optics, modern physics, and thermodynamics) and the core of graduate physics (theoretical mechanics, statistical mechanics, quantum mechanics, and electromagnetic theory).

Before taking the Comprehensive Examination, the student is to round
out his or her personal knowledge of physics and to acquire a knowledge of some area of current research in physics. Advanced studies in at least two specialized fields will be pursued. Normally, the requirement is met by taking at least two sequences, not all from the same class: Class I. Solid State and Statistical Physics ; Class II. Nuclear and Particle Physics; Class III. Atomic Physics.

The Comprehensive Examination is an oral examination. The candidate will present a discussion, lasting about an hour, of a current problem in physics and propose an idea for a research project. The candidate is expected to understand the background and fundamental physics of the problem, and to communicate this knowledge to physicists in other fields.

The thesis is the most important requirement. Every candidate for the Ph.D. degree must submit a thesis embodying the results of research, and showing evidence of originality and ability in independent investigation. The thesis must be a real contribution to knowledge, based on the candidate's own investigations. It must show a mastery of the literature of the subject and be written in creditable literary style.

Foreign Language Requirement. The Department of Physics expects that all incoming graduate students whose native language is English will have proficiency in one of the following foreign languages: French, German, or Russian. Proficiency may be demonstrated by passing the foreign language standard achievement test of the College Entrance Examination Board, or by completing certain courses.

Students whose native language is not English may select English as the required foreign language. Such students must then pass an English proficiency test administered by the Counseling Center with an equivalent grade of $C$ or better.

The language requirement must be satisfied before the student can take the Comprehensive Examination.

## Undergraduate Courses

Ph 101, 102, 103. Essentials of Physics. 3 credit hours each term. An introductory course for students not majoring in physics, chemistry, or biology but who require a sound technical knowledge of fundamental physical principles. Less mathematical preparation is needed than for $\mathrm{Ph} 201,202$, 203. Three lectures. Prerequisite: Mth 95.

Ph 104, 105, 106. Descriptive Astronomy. 3 credit hours each term. Descriptive treatment of both the solar and stellar systems, including the earth, moon, sun, planets, comets and meteors, properties of individual stars, star clusters, bright and dark nebulae, double and multiple stars, variable stars, our galaxy, the extragalactic system, and the expanding universe. Techniques of astronomical discovery are emphasized. Occasional viewing of celestial objects with a telescope. A working knowledge of high school algebra is required. Three lectures.
Ph 108, 109. Elementary Astronomy. 3 credit hours each term. Ph 108: The Solar System. A brief discussion of the solar system, including the sun; the individual planets, their motions and satellites; the origin, nature and behavior of comets; meteorites; and the origin of the solar system. Three lectures. Ph 109: The Stellar System. A brief discussion of individual stars and their properties, double stars, star clusters and details of our galaxy, the universe of galaxies and the expanding universe. Three lectures.
Ph 110. Atoms and Nuclei. 3 credit hours. Nonmathematical introduction to the physics of atoms and nuclei, intended for liberal arts students who want an understanding of contemporary scientific thinking without technical details. Topics include the most important general concepts of atomic and nuclear physics, submicroscopic systems, the wave nature of matter, and uncertainty. Nuclear forces, radioactivity, fission and fusion are covered with emphasis on the underlying ideas. Three lectures.
Ph 112. Space, Time, and Motion. 3 credit hours. Interpretation of the fundamental properties of space, time, and motion. Newton's laws of motion are postulated and applied and Newtonian concepts of space and time are discussed. The properties of light are reviewed and shown to be inconsistent with Newtonian concepts. The development of the special and general theories of relativity are traced, and relativistic concepts extended to include the effects of gravity on space-time. Prerequisite : high school algebra. Three lectures.
Ph 114. Physics of Energy and Pollution. 3 credit hours. Physical aspects of human use of energy and accompanying changes in the environment'; nature of the present energy and environmental crises and suggested solutions; power needs and sources, pollution problems and remedies. Primarily for nonscience majors. Three lectures.
Ph 116. The Sun as a Future Energy Source. 3 credit hours. The physics of solar energy and its application to man's energy problems. Electromagnetic waves, quantization, geometrical optics, and thermodynamics as they apply to sunlight are considered. The theory of energy generation by the stars; the greenhouse effect of the earth's atmosphere; concentrating and planar solar energy collectors, solar cells, and solar furnaces are discussed. Practical aspects of generating electrical power from solar energy using a conventional thermodynamic cycle, and heating and cooling of homes with solar energy are examined in detail. Prerequisite : high school algebra. Three lectures.
Ph 117. Elementary Electricity. 3 credit hours. Elementary study of magnetic and electromagnetic phenomena and their applications in everyday life. Electrical charge and current; magnetism; energy production and conversion; the electron and electromagnetic waves ; applications in electric power generation and transmission, electric motors, radio, radar, and television. Three lectures.

Ph 131. Physics of Sound and Music. 3 credit hours. An elementary explanation of the physics of sound presented in a way particularly useful for music majors. Class size limited because of equipment used in demonstrations. Primarily for music majors. Three lecture/demonstrations.

## Ph 199. Special Studies. 1-3 credit hours.

Ph 201, 202, 203. General Physics. 4 credit hours each term. First-year college physics for science majors. Prerequisite: Mth 101, 102 or equivalent. Four lectures.
Ph 204, 205, 206. Introductory Physics Laboratory. 2 credit hours each term. Introduction to principles and methods used in experimental science. Students learn to solve physical problems based on real physical situations, correlating experiment and theory. Fall: Experimental error, force, momentum, energy; Winter: Electricity, magnetism, electronic measurements; Spring: Optics, atomic and nuclear physics. Prerequisite: Ph 101, 102, 103 ; or Ph 201, 202, 203, or Ph 211, 212, 213, or concurrent registration in one of these sequences. One discussion and one three-hour laboratory period.
Ph 211, 212, 213. General Physics (with Calculus). 4 credit hours each term. An introductory physics course for science majors. This course contains the same material as $\mathrm{Ph} 201,202,203$, but the gradually increasing use of calculus allows treatment in greater depth. Prerequisite : concurrent registration in the Mth 201, 202, 203 sequence, or the prior study of calculus. Four lectures.
Note: General physics and calculus, or consent of instructor, are prerequisite to all upperdivision and graduate courses except for Ph 321, 322, 323.
Ph 321, 322, 323. Elements of Classical Physics. 4 credit hours each term. An intermediate treatment of mechanics, electricity and magnetism, and thermal physics. This course is especially suitable for students who plan to teach science subjects in secondary schools. Not open to students who have credit for Ph 324, 325, 326. Prerequisite : Ph 101, 102, 103. Prerequisite or concurrent : Mth 207, 208, 209 or equivalent. Four lectures. Not offered 1978-79.
Ph 324, 325, 326. Classical Mechanics. 3 credit hours each term. Fundamental principles of Newtonian mechanics; conservation laws; small oscillations; rigid bodies; special relativity ; planetary motion; Lagrangian and Hamiltonian mechanics. Three lectures.
Ph 351, 352, 353. Thermodynamics and Statistical Physics. 3 credit hours each term. Thermodynamics : equation of state, laws of thermodynamics, phase changes, entropy. Kinetic Theory : collision processes, transport phenomena. plasma state. Statistical Physics : phase space, entropy and probability, canonical distribution, quantum statistics, specific heat, low temperature phenomena. Prerequisite: concurrent registration in $\mathrm{Ph} 324,325,326$ or consent of instructor. Three lectures.
Ph 401. Research. Credit hours to be arranged.
Ph 405. Reading and Conference. Credit hours to be arranged.

## Ph 408. Special Laboratory Problems. <br> Credit hours to be arranged.

Ph 409. Supervised Tutoring Practicum.
1-3 credit hours any term. A no-grade course.

## Upper-Division Courses Carrying Graduate Credit

Ph 407. Seminar. (G) Credit hours to be arranged. The following topics are offered for one term each.
Biophysics. 3 credit hours.
Microcomputers. 4 credit hours.
Modern Optics. 3 credit hours.
Ph 417, 418, 419. Elements of Atomic, Nuclear, and Solid State Physics. (g) 4 credit hours each term. An introductory treatment of atomic, nuclear, and solid state physics with major emphasis upon the experimental foundations. Especially suitable for students preparing for secondary school teaching of chemistry or physics. Topics covered include relativity, atomic structure, optical and X-ray spectra, nuclear reactions, fundamental particles, particle accelerators, crystal structure, and properties of metals, insulators, and semiconductors. Not open to students who have credit for $\mathrm{Ph} 421,422,423$. Four lectures. Not offered 1978-79.
Ph 421, 422, 423. Modern Physics. (G) 3 credit hours each term. The experimental foundations of quantum physics. Atomic physics; introductory nuclear physics; solid state physics. Prerequisite: $\mathrm{Ph} 324,325,326$, or consent of instructor. Not open to stidents who have credit for $\mathrm{Ph} 417,418,419$. Three lectures.
Ph 431, 432, 433. Optics and Atomic Spectra. (G) 3 credit hours each term. Image formation for coaxial systems, defects of images, effects of apertures, optical instruments. Interference, diffraction, polarization. Propagation of light through anisotropic media. Electromagnetic theory of reflection and refraction ; absorption and dispersion ; scattering; magneto- and electro-optics. Atomic energy states, vector model and quantum-mechanical description. Fine structure and hyperfine structure, Zeeman effect, X-ray spectra. Three lectures. Not offered 1978-79.
Ph 434, 435, 436. Optics Laboratory. (G) 1 credit hour each term. Laboratory exercises in geometrical and physical optics, designed to accompany the material discussed in $\mathrm{Ph} 431,432,433$. One three-hour laboratory period. Not offered 1978-79.
Ph 441, 442, 443. Electricity and Magnetism. (G) 3 credit hours each term. Advanced undergraduate study of electromagnetic phenomena, with primary emphasis on Maxwell's equations, electromagnetic waves and applications of wave theory to interference, diffraction, polarization, wave guides, cavities, etc. Prerequisite : Ph 324, 325,326 . Three lectures.
Ph 451, 452, 453. Introduction to Quantum
Mechanics. (G) 3 credit hours each term.
Elementary quantum mechanics; the Schroedinger equation, wave functions and wave packets, uncertainty principle, hermitian operators, one-dimensional problems, the WKBJ approximation, angular momentum and spin, the hydrogen atom, identical particles, approximate methods, elementary scattering theory. Prerequisite: Ph 324, 325, 326 and concurrent registration in $\mathrm{Ph} 421,422$, 423. Three lectures.

Ph 461, 462, 463. Electronics. (G) 4 credit hours each term. Circuits and techniques for physical measurements. Emphasis is on modular integrated circuit building blocks and modular instrumentation. The three quarters may be taken independently but form an integrated sequence. Fall : Discrete circuits and measurements. Passive and active solid state components ; general circuit concepts and theorems ; general measuring techniques
and instruments. Winter : Analog electronics. Operational amplifiers, with applications in control, simulation, generation, and processing of signals. Spring: Digital electronics. Use of integrated circuit switching modules; digital logic and its electronic representation ; digital measurements and control.
Ph 481. Special Relativity. (G) 3 credit
hours. The Lorentz transformation, relativistic kinematics, 4-vectors, electromagnetic fields. Three lectures.
Ph 491. X-Ray Crystallography. (G) 4 credit hours. X-ray diffraction. Bragg's law, crystal symmetry, the reciprocal lattice, structure factors and Fourier syntheses, the phase problem, methods of determining small and macromolecular crystal structures. Laboratory work includes manipulation and alignment of crystals, taking and analyzing X-ray photographs, and use of basic X-ray diffraction equipment. Three lectures, one laboratory period. Consent of instructor is required. Not offered 1978-79.

## Graduate Courses

Ph 501. Research. Credit hours to be arranged.
Ph 503. Thesis. Credit hours to be arranged.
Ph 505. Reading and Conference. Credit hours to be arranged.
Ph 507. Seminar. Credit hours to be arranged. The following topics are offered with 1 credit hour each term, no grade. Physics Colloquium.
Condensed Matter Seminar.
Atomic and Nuclear Physics Seminar. Theoretical Physics Seminar.
Ph 509. Supervised Tutoring Practicum.
$1-3$ credit hours any term. A no-grade course.
Ph 511, 512, 513. Theoretical Mechanics.
3 credit hours each term. Lagrangian and Hamiltonian mechanics; small oscillations; rigid bodies; introduction to statistical mechanics.
Ph 521, 522, 523. Electromagnetic Theory. 3 credit hours each term. Microscopic form of Maxwell's equations ; derivation and solution of the wave equation; relativistic formulation; motion of charges in given fields; propagation and diffraction, radiation by given sources; coupled motion of sources and fields; the electromagnetic field in dense media. Three lectures.
Ph 531, 532, 533. Quantum Mechanics. 3 credit hours each term. Matter waves and Schroedinger equation ; statistical interpretation ; measuring process; uncertainty relations; complementarity; classical limit and WKBJ approximation; scattering symmetries and conservation laws; identical particles and permutation symmetry; approximation methods ; Dirac equation ; field quantization and radiation theory ; recent advances. Prerequisite : $\mathrm{Ph} 451,452,453$; $\mathrm{Ph} 511,512,513$, and $\mathrm{Ph} 521,522,523$, or concurrent registration in the latter two. Three lectures.
Ph 541, 542, 543. Statistical Physics. 3 credit hours each term. Thermodynamics, statistical mechanics, kinetic theory; application to gases, liquids, solids, atoms, molecules, and the structure of matter. Three lectures. Ph 551, 552, 553. Nuclear Physics. 3 credit hours each term. Properties of nuclei; the deuteron ; nuclear forces; electromagnetic transitions, beta decay; single-particle and collective aspects of nuclear structure ; nuclear reactions; neutron physics. Prerequisite : an introductory course in quantum mechanics, such as $\mathrm{Ph} 451,452,453$. Three lectures.

Ph 561, 562, 563. Elementary Particle Physics. 3 credit hours each term. Intrinsic properties of elementary particles, conservation laws. Electromagnetic, strong and weak interactions of elementary particles. Fundamentals of experimental techniques. Field theory, S-matrix theory, group theory, and other constructs. Phenomenological methods used to analyze particle reactions. Elements of scattering theory. Prerequisite: Ph 531 , 532,533 , or equivalent. Three lectures.
Ph 564, 565, 566. Advanced Elementary Particle Physics. 3 credit hours each term. Detailed discussion of special topics in elementary particle physics, to be chosen each year from such areas as scattering theory, field theory, dispersion relations, group theoretical symmetries, current algebras, general relativity, as well as other timely subjects as they arise in current elementary particle research. Prerequisite : Ph 561, 562 , 563. Three lectures. Not offered 1978-79.

Ph 571, 572, 573. Solid State Physics. 3 credit hours each term. Crystallography ; thermal, electrical, optical, and magnetic properties of solids; band theory ; metals, semiconductors, and insulators; defects in solids. Prerequisite: $\mathrm{Ph} 451,452,453$. Three lectures.
Ph 574, 575, 576. Theory of Condensed
Matter, 3 credit hours each term. Advanced statistical mechanics and many-particle quantum mechanics, with emphasis on collective effects such as superfluidity, superconductivity, and ferromagnetism. Prerequisite : $\mathrm{Ph} 531,532,533, \mathrm{Ph} 541,542,543$, and Ph 571 , 572, 573. Three lectures.
Ph 581, 582, 583. Atomic Spectra. 3 credit hours each term. A survey of theoretical atomic physics, including general features of atomic spectra, angular momentum and multiplet theory, atomic wave functions, hyperfine structure, excitation and deexcitation processes. Three lectures.
Ph 594, 595, 596. General Relativity. 3 credit hours each term. Tensor analysis and Riemannian geometry; Einstein's field equations; experimental observations ; symmetries and conservation laws; gravitational radiation ; other theories of gravity; applications to astrophysics and cosmology. Prerequisite: $\mathrm{Ph} 511,512,513$. Three lectures. Not offered 1978-79.

# Political Science 

## Faculty

John M. Orbell, Ph.D., Department Head, Professor of Political Science (choice theory, urban, elections). B.A., 1957, M.A., 1960, New Zealand; Ph.D., North Carolina, 1965. Willian H. Baugh, Ph.D., Assistant Professor of Political Science (international relations). S.B., MIT ; M.S., Rochester, 1965 ; M.A., 1971, Ph.D., 1973, Indiana.
James C. Davies, Ph.D., Professor of Political Science (political behavior; revolution; fiction). A.B., Oberlin, 1939 ; Ph.D., California, Berkeley, 1952.

Joseph R. Fiszman, Ph.D., Professor of Political Science (comparative politics). B.A., St. John's, Shanghai, 1948 ; M.A., Emory, 1956 ; Ph.D., Michigan State, 1964.
Daniel Goldrich, Ph.D., Professor of Political Science (political development : American, third world). B.A., Antioch, 1955 ; M.A., 1957, Ph.D., 1959, North Carolina.
Arthur M. Hanhardt, Jr., Ph.D., Professor of Political Science (comparative politics, Europe). B.A., Rochester, 1953 ; M.A., Colgate, 1958 ; Ph.D., Northwestern, 1963. (On sabbatical leave fall 1978.)
Thomas Hovet, Jr., Ph.D., Professor of Political Science (international organization). A.B., Washington, 1948 ; M.A., New York University, 1949 ; Ph.D., New Zealand, 1954.
James R. Klonoski, Ph.D., Professor of Political Science (American government ; presidency; constitutional law and politics). B.S., 1947, M.A., 1948, Minnesota; Ph.D., Michigan, 1958.
Jerry F. Medler, Ph.D., Associate Professor of Political Science (political theory, research methods). B.A., Northwestern, 1963 ; M.A., 1965, Ph.D., 1966, Oregon.
Judith Merkle, Ph.D., Assistant Professor of Political Science (public administration). B.A., California, Berkeley, 1962 ; M.A., Harvard, 1964 ; Ph.D., California, Berkeley, 1974.
Joyce M. Mitchell, Ph.D., Professor of Political Science (public policy, legislative politics). B.A., Pomona, 1952 ; M.A., 1954, Ph.D., 1964, California, Berkeley.
William C. Mitchell, Ph.D., Professor of Political Science (democratic institutions, public policy). B.A., Michigan State, 1950 ; M.A., Illinois, 1951 ; Ph.D., Harvard, 1960.

Lazerence C. Pierce, Ph.D., Associate Professor of Political Science (public administration, public finance). B.A., Yale, 1959 ; M.P.A., 1965, Ph.D., 1970, Cornell.
Keith T. Poole, Ph.D., Assistant Professor of Political Science (American politics, econometrics, research methods ). B.A., Portland State, 1972 ; M.A., 1975, Ph.D., 1978, Rochester.
W. Parkes Riley, Ph.D., Assistant Professor of Political Science (South Asia, political theory). A.B., Harvard, 1963 ; M.A., 1965, Ph.D., 1974, California, Berkeley.
Thomas N. Thompson, Ph.D., Assistant Professor of Political Science (international relations, modern China). B.A., Wabash College, 1970; M.A., 1972, Ph.D., 1977, Jolins Hopkins.
M. George Zaninovich, Ph.D., Professor of Political Science (political theory; eastern Europe). B.A.. 1953, M.A., 1959, Ph.D., 1964, Stanford.
L. Harmon Zeigler, Ph.D., Professor of Political Science ; Research Associate, Center for Educational Policy and Management (American politics). B.A., 1957, M.A., 1958, Emory ; Ph.D., Illinois, 1960.

## Faculty Emeriti <br> Charles Schleicher, Ph.D., Professor Emeritus of Political Science (international relations). A.B., College of Pacific, 1928; M.A., Hawaii, 1931 ; Ph.D., Stanford, 1936; at Oregon since 1947.

## Political science at Oregon offers a

 variety of approaches to understanding politics and government. Students may study political science with an emphasis on the normative, traditional perspective, the "behavioral persuasion" of the 1950 s and 60 s , and the public policy and public choice thrust of the "postbehavioral era." The department encourages students to become involved in research projects, focusing on the political problems and issues besetting local, state, and national communities.
## Undergraduate Studies

The undergraduate program in political science is designed: (1) to provide a systematic understanding of the political process ; (2) to provide a basic background to students preparing for careers in government (local, state, and national), law, journalism, and the teaching of social studies; (3) to prepare students for graduate work leading to professional careers in political science.

The 100 - and 200 -level (lowerdivision) courses in the department are designed to provide fundamental introductory courses, basic to building a major in political science.

The 300-level (upper-division) courses are designed to provide awareness of the chief areas and concerns of political science. PS 321, Introduction to Political Analysis ; PS 322, Introduction to Comparative Politics; and PS 325, American Foreign Policy, are conceived as primary courses, providing a useful basis for 400 -level courses. In response to student demand, the department recently added several new 300 courses, including: PS 330, Introduction to Political Theory; PS 339, Middle East Politics ; PS 345, Urban Politics; PS 347, Political Power, Influence, and Control ; PS 340, Introduction to Public Policy ; PS 348, The Politics of Education ; PS 336, Political Systems of Postwar Germany; PS 341, Problems in American Political Economic Development ; PS 349, Mass Media and American Politics.

The 400 -level (also upper-division) courses are the advanced and specialized courses in the department. A variety of these courses are offered in the chief areas of political theory and methodology, comparative government, public policy, and international relations. Recent additions are PS 423, Ocean Politics ; PS 443, Politics of MultiEthnic Societies; PS 471 The Human Organism and Political Development; PS 497 Environmental Politics. At the discretion of the instructor, there may be specific course prerequisites for taking certain 400 -level courses. It is recommended, but not required, that students have at least 9 credit hours in political science courses before taking 400 -level courses.

Requircments for a Political Science Major. Students majoring in political science are required to complete a minimum of 42 credit hours of undergraduate political science courses leading to a Bachelor of Arts or Bachelor of Science degree. At least 30 credit hours must be upper-division courses and graded. However, 12 credit hours of lower-division (100- and 200-level) courses may be taken on a pass-no-pass basis. Work completed in Seminars (PS 407) may be included within the 42 -hour requirement. Search courses may be taken only on a pass-no pass basis and therefore do not count toward the political science requirements. Courses passed with a D grade may not be contributed toward a political science major. No special
curriculum is required for political science majors.

No more than 10 credit hours of field work may be applied toward the 42 hours. This work must be done under the direction of a faculty member who has set up academic criteria to evaluate the work. The student must be registered in the University while earning credit.

There are no departmental requirements for entering freshmen. Students planning to transfer to Oregon from two-year colleges should take the basic introductory political science courses offered at those institutions. At least six courses in political science must be completed in residence at the University of Oregon to qualify for a B.A. or B.S. degree in political science.

The department believes that each student should plan a personal course program in the light of what courses will be most useful for each student's career objective. The pass-no pass opportunity for 12 credit hours of lower-division courses is made available so that students will feel encouraged to get these fundamental courses without apprehension about a grade. It is hoped that students taking those courses will therefore concentrate on building a solid base for other more advanced courses.

By requiring only 42 credit hours of courses, instead of specific course requirements, the department is placing the responsibility on each student to carefully plan a program of courses that will be most useful to career goals. It is recognized that different career goals may merit different course programs. We also recognize that a career goal may well involve not simply planning a course program in political science, but also should involve an awareness of courses in other departments of the University that are relevant. Undergraduate majors have to realize that the choice of courses they select may well affect their career opportunities. It is extremely important that decisions about a course program be carefully planned.

With the help of a faculty adviser, the student should set out a model program. This is not intended to be mandatory but rather to suggest what courses might be appropriate for the particular career objectives. Some "model" course programs are available from the department. It is essential that a student consult as soon as possible before registration, and frequently thereafter with advisers in considering choices of actual courses.

The department owns television equipment which is available for use in
classes, and for research projects undertaken by students under the direction of members of the staff.

Secondary School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Teacher Standards and Practices Commission requires (1) the satisfaction of certain minimum standards of subject preparation, (2) the satisfaction of certain minimum standards of professional educational preparation, and (3) the recommendation of the institution at which the student completes the subject preparation. For details of this program, consult the special adviser for teacher education in the Department of Political Science or the Office of Student Teaching and Teacher Certification in the College of Education.

## Graduate Studies

The Department of Political Science offers a graduate program of studies leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. The program is designed to prepare a student for teaching, research, and governmental or other public service, as well as to enable the student to understand and participate in public affairs. Regular members of the department, special lecturers, and occasional visiting faculty members offer advanced courses and seminars in most fields of political science. Joint faculty-student studies, interdepartmental research projects, and individual research are currently being conducted in such diverse areas as public administration in European nations, political parties, the politics of educational finance, the failure of public programs, political socialization in East Europe, revolution, the politics of the sea, public policy in several countries, international relations, origins of violence and the theory of democratic institutions.

The program is designed for flexibility. There are no courses specifically required (other than the Graduate School language requirement), and no designated fields of political science. A group of courses dealing with techniques of analysis is offered, butbecause students enter graduate school with varying skills-no particular sequence is required. Students are encouraged to consult with their adviser and the course instructors in developing a "skill" program that meets their particular needs.

The student develops a program in conjunction with a special committee
chosen by the sttudent and consisting of three faculty members. This committee evaluates the student's progress toward a degree. During the first month of graduate work, each student selects a faculty member to chair a special committee. It is the privilege of the graduate student to ask any faculty member in the department to chair the committee. The faculty member chairing the committee discusses with the graduate student the area of interest in political science and recommends other faculty nembers either within the department or in other departments of the University who might represent those areas on the special committee.

During the first phase of the graduate program (for master's candidates), the special committee helps the graduate student select a program of study and supervises the preparation of a bibliographic essay. The special committee also evaluates the essay and overall performance and decides whether the student is permitted to advance to the Ph.D. program.

During the second phase of the graduate program (for students in the Ph.D. program), each graduate student continues to be directed by a special committee. Since the student may have been uncertain of specific interests at the time the master's committee was chosen, the student is encouraged to change the membership of the special committee (called Committee 1 and Committee 2, at this stage) as interests in political science change.

The three-person committee, however constituted, advises the student on the program of study, and supervises either the writing of two research papers or the teaching of a course and one paper. Because the committees for the two Ph.D. papers must not overlap, students are obliged to work with at least six different faculty members; if they select different committees for their three papers and dissertation, they will have worked with at least twelve faculty members.

When the student has completed either a research paper or a course or both, the special committee evaluates the paper or course and schedules a public presentation. Successful completion and presentation of a research paper or course is a requisite for continuing on to a second paper or the teaching of a course. That is, Committee 1 advises on the first paper or course with oral examination. Upon successful completion of both research papers or one paper and teaching one course, the student is advanced to candidacy for the Ph.D. degree.

Details of the graduate program may be obtained by consulting the department. Information indicating admission requirements and procedures and describing graduate work will be provided by the department in response to all inquiries.

## Undergraduate Courses

PS 100. American Government. 3 credit
hours. A theoretical introduction to American institutions, American political doctrines, and the American ideology as these affect the course of politics and public policy in America. Klonoski, Fiszman, Medler, staff.
PS 101. Modern World Governments. 3 credit hours. An introduction to the political systems, practices, and institutions of leading contemporary nations, including Britain,
France, the Soviet Union, China, and selected nations within Africa and Latin America. Riley, Merkle.
PS 104. Problems in American Politics. 3 credit hours. An examination of current policy issues in American politics, e.g., unemployment, education, crime, etc. Pierce, Klonoski, Fiszman, Poole.

## PS 105. Crisis and Response in Inter-

 national Politics. 3 credit hours. Four major and continuing international crises examined in terms of the collective responses made by nation-states and international organizations: instability and conflict; environment; uneven economic development; population. A limited number of specific cases characterizing international crises and response analyzed each term. Hanhardt.PS 199. Special Studies. 1-3 credit hours. Topics to study to be arranged.
PS 203. State and Local Government. 3 credit hours. Emphasis is on linkage between elites (decision-makers) and masses, with attention to: values, beliefs, participation, process. Topics of study include mass participation, state and community elites, violence, public policy, and other related phases of the local and state political systems. Structure of the political system not emphasized. Zeigler, staff.
PS 205. International Relations. 3 credit hours. Emphasis varies. (I) An introduction to the intellectual tools for the analysis of relations among nations; the nature of international relations. Staff. (II) Political and economic relations between the U.S. and the Third World. Sources of U.S. involvement in Third World politics : U.S. structure of power in foreign and defense policy areas; national security bureaucracy; concentration and growth of American political and economic power, consequences for relationships with the Third World ; the public and foreign policy toward the Third World; development strategies. Goldrich, Hovet, Baugh.
PS 207. Introduction to Political Science. 3 credit hours. Theories, concepts, and research methods appropriate to understanding how conflicts among people are resolved; political analysis in the context of the behavioral sciences; conflict resolution; institutions, and organizations which operate to resolve conflict. Medler, Riley, Orbell, staff. PS 225. Political Ideology. 3 credit hours. Examines the role of ideology, the organization of propaganda, and the structure of mass political action in the modern state. Systems of 20th century political thought, including the Liberal-Democratic, Socialist, Fascist, and Communist, will be discussed. Merkle, Zaninovich.

PS 230. Urban Politics. 3 credit hours.
Conflict in cities ; power structures; protest movements and political participation; urban political institutions ; critiques of urban politics ; black politics. Orbell, Poole.
PS 250. Logic of the Good Society. 3 credit hours. The problem of how to organize a "good society" given the logic of collective dilemmas : that self-interested action by individuals can lead to collective outcomes that are against everyone's interests, economically, environmentally, and socially. Orbell.
PS 321. Introduction to Political Analysis. 3 credit hours. Introductory survey of the basic scope and methods of contemporary political science, including: philosophy of social science, political ethics, empirical theory, and political methodology. Medler, J. Mitchell, Riley, W. Mitchell, Orbell, Baugh.

PS 322. Introduction to Comparative Politics. 3 credit hours. Analysis of major concepts and approaches in the study of comparative government and politics. Hanhardt, Riley
PS 325. American Foreign Policy. 5 credit
hours. Basic concepts underlying the formulation and implementation of American foreign policy ; relationships between American society and American foreign policy, the relationship of the United States to other governments, and the relationship of the United States to its international environment, including governmental and nongovernmental organizations. Thompson, Baugh.
PS 326. Theories of International Politics. 5 credit hours. A systematic analysis, drawing upon a variety of theoretical frameworks of the basic features of the international political system, the goals and objectives of its members, and the strategies whereby the members of the system seek to obtain their goals. Baugh.
PS 330. Introduction to Political Theory. 4 credit hours. Various approaches suggested by selected political theorists, past and present; problem of knowledge as it relates to politics for practitioner and scientist ; various modes of transmitting ideas about the nature of political experience ; relationship between political knowledge and political activity. Zaninovich.
PS 335. Communist Political Systems. 4 credit hours. A comparative politics study of a number of Communist political systems as specific variants of government and politics in today's world. Introduces the student to the general nature of Communist political systems viewed within the context of comparative politics. Zaninovich.
PS 336. Political Systems of Postwar Germany. 3 credit hours. Establishment of the Federal Republic of Germany (FRG) and the German Democratic Republic (GDR) in 1949 along with the occupation period of the four preceding years; the development of the respective political systems including parties, interest groups, elections, and foreign policy. Hanhardt.
PS 337. Southern Asia in Modern Times. 5 credit hours. Historical background and contemporary political systems and major problems of India, Pakistan, Bangladesh and Sri Lanka since 1947. Riley.
PS 338. Southern Asia in Modern Times. 5 credit hours. Historical background and contemporary political systems and major problems of Burma, Thailand, Malaysia, Singapore, Laos, Cambodia, Vietnam, the Philippines, and Indonesia. Riley.
PS 339. Middle East Politics. 3 credit hours. Course to cover history, traditions,
culture, and politics of the Middle East.
Emphasis is on dimensions of conflict, impact of tradition and culture on local and national politics, comparison of Middle Eastern political systems, and the role of the Middle East in international politics. Staff.
PS 340. Introduction to Public Policy. 3 credit hours. Consideration of alternative means of explaining the process of policymaking, and alternative strategies of decisionmaking in the policy process, applied to issues of contemporary concern. J. Mitchell.

## PS 341. Problems in American Political

 Economic Development. 3 credit hours. Examination of structure of American political economy, how that structure generates some crucial problems, some alternative approaches for restructuring the political economy in more developmental directionstoward more effective democratic control and more effective meeting of needs. Goldrich.
## PS 344. Public Policy and Citizen Action.

 3 credit hours. A quest for ideas on ways citizens can affect the operation of governmental policy other than by the regular political party campaign and electoral process; methods, strategies, resources, and opportunities for action aimed at affecting policies. Cases and precepts considered on basis of assigned readings, observed situations, or research sources. J. Mitchell.PS 345. Urban Politics. 3 credit hours. Conflict in the city, general theory ; power and political resources; where power resides; the uses of protest ; the meanings of violence; strategies for the discontented; alternative strategies for blacks; community control as an alternative; urban politics; a theoretical overview. Orbell.

## PS 347. Political Power, Influence, and

 Control. 3 credit hours. Examination of political power as a central concept in the study of politics and as an important aspect of political reality; major theoretical and empirical analyses in a variety of contexts; power in interpersonal relations as well as governmental institutions; relationship between power and democracy. Medler.PS 348. The Politics of Education. 3 credit hours. Assessment of the impact of high schools upon the political values and styles of students. Major emphasis of the course is: linkages between educational and political systems. Zeigler.
PS 349. Mass Media and American Politics. 3 credit hours. An examination of historical and contemporary uses of mass media in American politics; their theoretical as well as practical significance in the context of American society; the developmental aspects of electronic media and their effects on political institutions such as parties, pressure groups and the presidency; critical perspectives for normative evaluation of the media. Medler.
PS 351. Introduction to Public Administration. 3 credit hours. Examination of various approaches to and conceptions of public administration; application of various theories of administration to the study of public organizations ; substantive problems of organizations ; structure and internal administration ; personnel and finance. Merkle, Pierce.
PS 403. Thesis. Credit hours to be arranged.
PS 405. Reading and Conference. Credit hours to be arranged.
PS 406. Supervised Field Study. Credit hours to be arranged.
PS 409. Supervised Tutoring Practicum. $1-3$ credit hours.

## Upper-Division Courses <br> Carrying Graduate Credit

PS 407. Seminar. (G) Credit hours to be arranged. Not all of the following topics will be offered in any one year. Offerings vary from year to year, depending upon student interests and needs, and availability of faculty Classic Comparative Political Literature. Fiszman.
Comparative Communist Systems. Fiszman.
Comparative Labor Movements. Fiszman.
Logic of Political Inquiry. Baugh.
Survey of Empirical Literature. Baugh.
Comparative East European Political
Behavior. Fiszman.
Marxism : Classical and Contemporary.
Fiszman.
Marxism : Revolution vs. Guerrilla Warfare. Fiszman.
Problems of Developing Nations. Goldrich.
Politics of a Divided Nation. Hanhardt. Politics of Aging. Hanhardt.
International Relations Theory. Hovet
Asian Political Thought. Hovet.
U.S. Senate Simulation. Klonoski

Comparative Administration. Merkle. Comparative Government National Defense Policy. Merkle.
Russian Revolutionary Theory. Merkle.
Sino-Soviet Relations. Merkle.
Women in Politics. Merkle.
Introduction to Methodology. Medlar. Intermediate Research Methods. Medler
Mathematical Foundations. Medler.
Policy Analysis. J. Mitchell.
Policy Evaluation. J. Mitchell
Public Education Finance. Pierce.
Congress. Poole.
Topics in Multivariate Analysis I and II.
Poole.
History of Political Theory : Machiavelli to Rousseau. Riley.
History of Political Theory : Plato and Aristotle. Riley, Merkle.
Twentieth Century Political Theory. Riley. Nationalism and Imperialism. Riley.
Comparative Politics of the Third World. Riley.
Empirical Political Theory. Riley.
Rich Nations/Poor Nations. Thompson.
Chinese Foreign Policy. Thompson.
Political Development in the Balkans
Zaninovich.
PS 412. Administrative Organization and Behavior. (G) 3 credit hours. Theories of bureaucratic organization analyzed in different contexts; organizational theory considered, including small groups, the nature of authority and decision making ; research findings from several social sciences brought to bear : implications of large-scale organization for the individual reviewed in attempt to understand the kinds of accommodations individuals make to complex structures. Merkle, Pierce.
PS 413. The Politics of Bureaucracy. (G) 3 credit hours. Examination of effects of bureaucratic organization on the behavior of people in bureaus, and the factors affecting the supply of goods and services by bureaus : alternative forms of public organization and the conditions under which they are likely to improve the performance of government. Pierce.
PS 414. Political Parties. (G) 3 credit hours. Major theories of the United States political parties ; the primary function of parties in the United States as compared with other systems ; socialization and recruitment, political identification, voting behavior and party organizations. Klonoski, Poole.
PS 415. Political Parties. (G) 3 credit
hours. Political parties in the context of
United States, federalism ; parties in the
states considered comparatively; Oregon political parties in the context of metropolitan areas; the interrelationships of parties on several levels of government ; comparison with other systems. Klonoski, Poole.

## PS 416. Political Parties. (G) 3 credit

 hours. Parties on the national level-in Congress, the Presidency, administration, interest groups; parties and national decisionmaking. Emphasis on the Presidency and political leadership. Comparison with Western Europe and developing systems. Klonoski, Poole.PS 417. Unionization of Public Employees. (G) 3 credit hours. Unionization of public employees has produced fundamental changes in the manner in which decisions are made in the public sector. Explores the growth of public sector unions and the public policy issues unionization creates. The implications of unionization and collective bargaining in public education. Wherever possible, the topic of discussion will be related to Oregon's experience under its comprehensive collective bargaining statute. Pierce.

## PS 418. Literature and Politics of the

 USSR and Eastern Europe. (G) 5 credit hours. Soviet and East European life (styles, social relations, values, and standards) and politics as seen through the works of native novelists, poets, and dramatists. Fiszman.PS 420. International Organization. (G) 3 credit hours. Nature and extent of the organization of interaction among nations. Focus on the United Nations, but illustrations and generalization from a wide range of regional and functional organizations including the specialized agencies. Emphasis is on the process of communication interaction and bargaining negotiation within the organization environment. Hovet.
PS 421. International Organization. (G) 3 credit hours. Role of international organizations in the management and resolution of conflict. Specific confict situations in the U.N., regional and functional organizations considered in attempting to assess the utility of international organizations in handling conflict and affecting integration among states. Hovet.
PS 422. International Law. (G) 3 credit hours. Introduction to international public law as an aspect of international organization; international law and the political process ; the international Court of Justice. Hovet.
PS 423. Ocean Politics. (G) 3 credit hours.
Consideration of the politics of states in controlling and developing the oceans. Every issue focusing on the international community is reflected in ocean politics: relations between industrialized and developing states; the arms race ; the impact of science and technology or instifutions in society, on the environment; relations between states, international community organizations, and multinational corporations; food, energy, and resource management, communications and inter national trade, to mention a few. Hovet.
PS 424. Politics of Western Europe I. (G) 3 credit hours. Governmental institutions and political processes of Great Britain, France, the Federal Republic of Germany. Special attention to interest groups, parties and voting behavior in the period since World War II. Hanhardt.
PS 425. Politics of Western Europe II. (G) 3 credit hours. Governmental institutions and political processes of the smaller Western European democracies: Italy, Belgium, The Netherlands, and the Scandinavian countries. Hanhardt.

PS 427, 428. Government and Politics of the Soviet Union. (G) 3 credit hours each term. Governmental institutions and political processes in the Soviet Union. Fiszman.

## PS 430. Political Theory: Ancient and

 Medieval. (G) 4 credit hours. Survey of the theories of political order and process of the Ancient World and the Middle Ages; covers early Middle-Eastern political thought (including experience, Socrates and Plato, Aristotle and the Greek polis, Cicero and universal political community, Augustine and early Christian political theory, and Aquinas and rediscovery of Aristotle; an overview of this early period of the development of political theory in the Western World. Zaninovich.PS 431. Political Theory: Renaissance, Reformation, and Early Modern. (G) 4 credit hours. Survey of the development of political theory from the Renaissance (Machiavelli) through reactions to the French Revolution (Berke, Hegel) ; primary figures to be covered during the term are Machiavelli, Hobbes, Locke, Rousseau, and Hegel ; brief attention to the Conciliarists, Luther, Calvin, Bodin, Hooker, Harrington, Montesquieu, Kant, and Hume. Zaninovich, Riley.
PS 432. Political Theory: Nineteenth and Twentieth Centuries. (G) 4 credit hours. Survey of the history of political theory during the 19th century and the first half of the 20th including sources and origins of contemporary political thought: Utilitarianism and liberalism (Bentham, Tocqueville, Mill), radical and revolutionary traditions (Bakunin, Marx, Nietzsche, Sorel, Lenin, the Fabians), the beginning of social science (French positivism, Weber), and critiques or defenses of mass democracy (Michels, Mosca, Pareto, Freud, Ortega, Dewey). Riley, Zaninovich.
PS 433. Marxist Political Theories. (G) 3 credit hours. Examines the rich variations in Marxist theorizing-taking this in its broadest sense; also an investigation of the theoretical responses of Marxism to various environmental contexts. The different schools surveyed historically. Study of the problem of how Marxist theoretical expression and adaptation in one environment might compare to that in another. Zaninovich, Fiszman.
PS 435. Perspectives on Law. (G) 3 credit hours. Systematic examination of the variety of perspectives on the concept of law generated in Western political thought; includes the views of Plato, Aristotle, Aquinas, Hobbes, Marx, Austin, Weber, Kelsen, contemporary scholars in legal anthropology. Staff.
PS 438. Urban Politics. (G) 3 credit hours. Theoretical perspectives; the dispute about power structures; the political context; community conflict; political participation; urban protest movements ; new political forms, community control ; black politics in the city. Instructor's consent is required. Orbell, Poole. PS 440. Comparative Foreign Policies. (G) 3 credit hours. Comparative analysis of the international behavior of selected states in conflict such as the Middle Eastern states, etc. Consideration of the systemic and societal variables influencing their behavior, and an analysis of the quality and content of their international behavior. Hovet.
PS 441. Comparative Foreign Policies. (G) 3 credit hours. Comparative analysis of the international behavior of major states (i.e., USA, USSR, China). Consideration of the systemic and societal variables influencing their behavior, and an analysis of the quality and content of their international behavior. Hovet.
PS 442. Comparative Foreign Policies. (G) 3 credit hours. A comparative analysis of the
international behavior of selected developing states such as India. Nigeria, Brazil, others. Consideration of the systemic and societal variables influencing their behavior and an analysis of the quality and content of their international behavior. Hovet.
PS 443. Politics of Multi-Ethnic Societies. (G) 3 credit hours. A comparative analysis of political process and institutions of racially and ethnically plural societies; a selected number of societies, c.g., Nigeria, AustroHungary, United States, Switzerland, South Africa, Yugoslavia, Canada, may be considered; the effects of the existence of several different races and ethnic groups upon domestic political institutions and behavior; works toward a determination and understanding of the special features of political process and institutions in such multi-ethnic societies. Zaninovich.
PS 452. Elections and Opinions. (G) 3 credit hours. Electoral response in past presidential elections; electoral theory; primary elections; campaigning strategies; impact of the mass media. Orbell, Poole.
PS 453. Elections and Opinions. (G) 3 credit hours. Attitudes and beliefs in politics; ideology; voter motivation and values; party response to voters; impact of mass preferences on policy outcomes; elections and the democratic order. Orbell, Poole.
PS 456. Democratic Processes. (G) 3 credit hours. Application of formal rational models to democratic institutions and processes. W. Mitchell, Riley.

PS 457. Democratic Processes. (G) 3 credit hours. Details of democratic processes of resource allocation, distributions of benefits and burdens, and control. W. Mitchell, Riley.
PS 458. Democracy and Public Policy. (G) 3 credit hours. Criteria for the assessment of policy alternatives are reviewed and applied to a variety of situations involving resource allocation, distributions of benefits and costs, and the design of controls in a democracy. W. Mitchell.
PS 460, 461. Government and Politics of the Far East: China. (G) 3 credit hours each term. The political organization of modern China and the political behavior of significant groups of elites within Communist China ; historical and ideological background, revolutions, the problems facing the present regime, the relationships with other Communist states; treatment of various classes and groups in terms of ideology as well as political practice. Merkle, Thompson.
PS 463. Government and Politics of Latin America. (G) 3 credit hours. Concept, structure, and dynamics of dependency; the inter-American political economy ; the degree of interdependence between the U.S. and Latin America regarding markets, trade, resources, investment ; the relevance of the Chinese model ; range of third-world formulations on development values and associated strategies; the ecological crisis in relation to Latin America's escape from dependency. Goldrich. PS 464. Government and Politics of Latin America. (G) 3 credit hours. A comparative assessment of development directions in the dynamic Latin American societies-Brazil, Peru, Chile, and Cuba; special attention to the Andean Common Market. Consequences of the adopted strategy in meeting basic human material and social needs. Special resources or weaknesses of each country for developing independence. Goldrich.
PS 465. Government and the Economy. (G) 3 credit hours. Examines the relationship between government and the market economy; includes the politics of fiscal and
monetary policy, government budgeting and the regulation of economic activity. Pierce.
PS 466. Government Budgeting. (G) 3 credit hours. Introduction to ma jor theories, practices, and problems of government budgeting. Theory of public-resource allocation, the Federal budget, budgeting practices, incremental budgeting system, budgeting, the planning-programming-budgeting system, budgetary control, the politics of budgeting, intergovernmental fiscal relations, state and local budgeting, and current problems of government budgeting. Pierce.
PS 467. The American Presidency. (G) 3 credit hours. The Presidency is viewed ambivalently as the key institution in the American political system : the source of great good, but also of great harm. The positive and negative impact of the Presidency upon American democracy, its people and its institutions. Analysis of Watergate within context of national experience with the Presidency. Klonoski.
PS 470. Political Behavior. (G) 5 credit hours. Political behavior of individuals examined in the light of psychological and sociological theory; types of political institutions and kinds of government adapted to the needs and behavioral tendencies of people living in either developing or modern industrial and technological society. Recommended prerequisite: an introductory psychology course. Davies.
PS 471. The Human Organism and Political Development. (G) 3 credit hours. An analysis of research of the implications for political development and political violence of research and theory in the central nervous and endocrine systems. A major purpose is to review such research and theory as can help to evaluate conventional assumptions about the innateness of violent political behavior. This is not a laboratory research course, but students can move more rapidly in it if they have had one or more courses in neurophysiology,physiological psychology, or developmental psychology. Prerequisite : PS 470 , Political Behavior or PS 507 Seminar in Political Behavior, or instructor's consent. Davies.
PS 475. Political Development and Revolution. (G) 5 credit hours. Using historical, psychological, and sociological data, fundamental causes of political development, in its nonviolent and violent forms, are analyzed. Several past revolutions and their leaders are appraised with the aid of the fundamental common causes analyzed. Prerequisite : PS 470 Political Behavior, PS 471 The Human Organism and Political Development or PS 507 Seminar in Political Behavior or instructor's consent. Davies.
PS 476. Political Revolution: Research and Theory. (G) 5 credit hours. Oral and written reports, either on basic political development (from primitive local communities toward democratic nation-states) and revolution or on general theory and research in these closely related subjects. Davies.

## PS 478. Political Fiction. (G) 5 credit

 hours. Analysis of a variety of novels and other literature in the light of the implications of such works for the understanding of why people act as they do in their relationships to government. Recommended prerequisite : PS 470 and PS 475. Davies.PS 480. Oregon Legislative Process. (G) 3 credit hours. Examines major bills before the legislature and its politics of enacting them. Offered bi-annually during sessions of Oregon Legislature. Field trips required. Pierce.

PS 481. Oregon Administrative Process
(G) 3 credit hours, Explores major executive agencies and their rule-making and administrative behavior. Offered bi-annually in alternate years from PS 480. Pierce.
PS 482. Legislative Politics. (G) 3 credit hours. The study of legislative operations in various governmental settings; their functions and exercises of power, composition, decision-making, and influence in the political system. J. Mitchell.
PS 483. Allocation of Justice. (G) 3 credit hours. Study of the nature of justice and how it is administered by police, lawyers, district attorneys, juries, and judges. Klonoski.
PS 484. The Supreme Court in America. (G) 3 credit hours. The Supreme Court is analyzed as a political body and the judicial role is studied in the context of the economic, political, social, and psychological factors that influence the Court's decisions. Klonoski.
PS 485. Civil Rights and Civil Liberties. (G) 3 credit hours. The Supreme Court's rulings on civil liberties and civil rights, freedom and equality, especially under Warren and Burger. Klonoski.
PS 488. The Policy Process. (G) 3 credit hours. Systematic study of the factors involved in policy-making. Sources of demands, nature of decisions, problems of effectuation, and political consequences compared in various policy areas. J. Mitchell.
PS 489. Comparative Public Policies. (G) 3 credit hours. Definition and measurement of public policies for comparative purposes, in local, national and cross-national settings. Means of assessing their relationships, purposes, and impacts. Investigation of comparative theories about policy-making in terms of political, social, and environmental factors. Staff.
PS 490. Community Politics I. (G) 3 credit hours. Analysis of the nature of political processes and institutions at the local level, formal and informal decision-making ; distribution of political power in the context of democratic theory. Students prepare and show an audio-visual presentation (film, video tape, etc.) analyzing some aspect of community politics. Medler, Goldrich.

## PS 491. Community Politics II. (G) 3

 credit hours. Critical analysis of research in the area of community politics. Students are encouraged to develop and execute their own research projects. Prerequisite: PS 490. Medler, Goldrich.PS 492. Political Decision-Making. (G) 3 credit hours. Field studies, explorations of collective or public decision-making, theories of power, goals, and strategies, competition, and coalition formation applied to a variety of current political situations.

## J. Mitchell.

PS 496. National Security Policy. (G) 3 credit hours. Factors in the development of national security policy, with emphasis upon decision-making, and the implications and consequences of such policies, nationally and abroad. J. Mitchell, Merkle.
PS 497. Environmental Politics. (G) 3 credit hours. Our political economy's consequences for world environment ; political aspects of ecological principles; alternative political economics and political cultural conceptions-conviviality, "small is beautiful" political economics, and the steady-state political economy; the politics of transition, focusing especially on energy; experiments in ecologically oriented decentralization; problems, promise, and prospects regarding the political transition. Goldrich.

## Graduate Courses

PS 501. Research. Credit hours to be arranged.
PS 503. Thesis. Credit hours to be arranged
PS 505. Reading and Conference. Credit hours to be arranged
PS 506. Supervised Field Study. Credit hours to be arranged

PS 507. Seminar. Credit hours to be arranged Political Behavior. Davies.
Contemporary Political Theory. W. Mitchell. Logic of Good Society. Orbell.
Modes of Theory Construction. Orbell.
PS 509. Teaching Practicum. 1-5 credit hours.
PS 511. Quantitative Approach to International Politics I. 5 credit hours. A periodic review of the research literature, with attention given to the epistemological, methodological, and substantive concerns of scholars who employ quantitative approaches to international politics.
PS 512. Quantitative Approaches to International Politics II. 5 credit hours. Specific topics in quantitative international politics.

## PS 520. Cross-National Political Analysis

 I. 5 credit hours. Examination of research literature in the field ; includes basic epistemological and methodological issues encountered in cross-national analysis as procedure of scientific political inquiry, quality of cross-national data, concept formation, operationalization and measurement, research design, and data-analytic techniques.PS 521. Cross-National Political Analysis II. 5 credit hours, See PS 520 for details. PS 521 devoted to such specific areas of crossnational research as political development, domestic violence, etc.


## Psychology

## Faculty

Robert F. Fagot, Ph.D., Department Head, Professor (measurement theory, choice theory, psychophysics). B.S., Massachusetts Institute of Technology, 1946 ; Ph.D., Stanford, 1956.
Fred Attneave, Ph.D., Professor (perception, learning). B.A., Mississippi, 1942 ; Ph.D., Stanford, 1950.
Jacob Beck, Ph.D., Professor (perception, psychophysics, vision). B.A., Yeshiva, 1950 ; M.A., 1951, Ph.D., 1957, Cornell.
Sheldon Cohen, Ph.D., Assistant Professor (social, environmental, race relations). Ph.B., Monteith College, Wayne State, 1969; Ph.D., New York University, 1973.
Robyn M. Dawes, Ph.D., Professor (social judgment, assessment, math models). B.A., Harvard, 1958 ; M.A., 1960, Ph.D., 1963, Michigan.
Beverly Fagot, Ph.D., Assistant Professor (developmental, early childhood). B.A., Occidental, 1960 ; Ph.D., Oregon, 1967.
Fred Fosmire, Ph.D., Professor (social, group problem solving, group consultation). B.A., 1948, M.A., 1949, Ph.D., 1952, Texas.
Lewis Goldberg, Ph.D., Professor (assessment, personality, clinical judgment). A.B., Harvard, 1953 ; M.A., 1954, Ph.D., 1958, Michigan.
Barbara Gordon-Lickey, Ph.D., Associate Professor (sensory physiology, sensory processing ). A.B., Radcliffe, 1963 ; Ph.D., Massachusetts Institute of Technology, 1966.
Marvin Gordon-Lickey, Ph.D., Associate Professor (physiological, learning). A.B., Oberlin, 1959; M.A., 1962, Ph.D., 1965, Michigan.
Douglas Hintzman, Ph.D., Professor (human learning and memory, computer simulation of cognitive processes). B.A., Northwestern, 1963 ; Ph.D., Stanford, 1967.
Ray Hyman, Ph.D., Professor (perception-cognition, coding processes, problem solving). A.B., Boston, 1950 ; M.A., 1952, Ph.D., 1953, Johns Hopkins.
Stephen M. Johnson, Ph.D., Associate Professor (behavior modification, child clinical, family interaction). B.A., Pittsburgh, 1964 ; M.A., 1966, Ph.D., 1968, Northwestern.
Steven Keele, Ph.D., Professor (human learning, human performance, motor skills ). B.S., Oregon, 1962 ; M.S., 1965, Ph.D., 1966, Wisconsin.

Janes G. Kelly, Ph.D., Professor, dual appointment with CSPA (human ecology and methods of social intervention). B.A., Cincinnati, 1953 ; M.A., Bowling Green, 1954 ; Ph.D., Texas, 1958.

Carolin Keutzer, Ph.D., Associate Professor (laboratory learning, interpersonal communication, outcome research in psychotherapy). B.A., 1960, M.A., 1963, Ph.D., 1967, Oregon.
Daniel P. Kimble, Ph.D., Professor (physiological, memory). B.A., Knox, 1956 ; Ph.D., Michigan, 1961.
Peter M. Lewinsohn, Ph.D., Professor (clinical, depression, neuropsychology). B.S., Allegheny, 1951 ; M.A., 1953, Ph.D., 1955, Johns Hopkins.
Edzerd Lichtenstein, Ph.D., Professor (clinical, psychotherapy research, community). B.A., Duke, 1956 ; M.A., 1957, Ph.D., 1961, Michigan.
Richard Littman, Ph.D., Professor (experimental, systematic, developmental). A.B., George Washington, 1943 ; Ph.D., Ohio State, 1948.
Richard Marrocco, Ph.D., Assistant Professor (sensory psychophysiology, vision). B.A., UCLA, 1965 ; Ph.D., Indiana, 1971.
Vivian Olum, Pl.D., Associate Professor (clinical, child). B.A., Swarthmore College, 1943 ; Ph.D., Cornell, 1957.
Diana L. Pien, Ph.D., Assistant Professor (developmental, learning, psycholinguistics). B.S., University of Illinois, 1969 ; Ph.D., California, Los Angeles, 1973.

Michael I. Posner, Ph.D., Professor (thinking, human performance, learning). B.S., 1957, M.S., 1959, Washington ; Ph.D., Michigan, 1962.
Mary K. Rothbart, Ph.D., Assistant Professor (developmental, socialization, development of laughter and humor in children). B.A., Reed, 1962 ; Ph.D., Stanford, 1967.
Myron Rothbart, Ph.D., Associate Professor (social, personality). B.A., Reed, 1962 ; Ph.D., Stanford, 1966.
Philip Runkel, Ph.D., Professor (social, cognitive structure), dual appointment with CASEA. B.S., Wisconsin State, 1939 ; M.A., 1954, Ph.D., 1956, Michigan.
Benson Schaeffer, Ph.D., Associate Professor (developmental, cognitive, psycholinguistics). B.A., 1962, M.A., 1964, Ph.D., 1967, California.
Norman Sundberg, Ph.D., Professor (clinical, personality, community). B.A., Nebraska. 1947 ; M.A., 1949, Ph.D., 1952, Minnesota.
Robert L. Weiss, Ph.D., Professor
(clinical, personality, marital inter-
action). B.A., 1952, Ph.D., 1958, State University of New York at Buffalo. Wayne Wickelgren, Ph.D., Professor (learning and memory). A.B., Harvard, 1960 ; Ph.D., Berkeley, 1962.

## Faculty Emeriti

Robert Leeper, Ph.D., Professor Emeritus (learning, personality). B.A., Allegheny, 1925 ; M.A., 1928, Ph.D., 1930, Clark; at Oregon since 1937. Leona Tyler, Ph.D., Professor Emerita (individual differences, interest development). B.S., 1925, M.S., 1939, Pl2.D., 1941, Minnesota; at Oregon since 1940 .

## Undergraduate Studies

The undergraduate courses in psychology offered by the University are designed to serve several different objectives : to provide a sound basis for later professional or graduate training in psychology ; to satisfy the needs of students, majors and nonmajors, who are interested in psychology primarily as a part of a broad liberal education; and to provide a background in psychological principles and techniques as intellectual tools for work in other social and biological sciences and in such professional fields as education, business, law, and journalism.

The lower-division courses are intended to facilitate the several objectives of the psychology curriculum. A one-term general introduction to psychology (Psy 201) is designed to provide the student with an understanding of the fields of psychology and the common methods used. Psychology 211, 212 , and 213 are designed to provide instruction in the content of psychology as a natural science. Psychology 214, 215 , and 216 are designed to provide instruction in the content of psychology as a social science. An Honors College introduction is available (Psy 217 and 218). The student should plan on taking not more than three courses at the lower-division level before starting upper-division work. The introductory courses should be chosen with an eye toward suggested prerequisites of upper division courses and to providing a broad background in the field.

Following an introduction to psychology, the student is ready to move to the upper-division level. These courses fall into three categories. First, Psy 301 and Psy 302 are designed to teach research skills and methodologies. Second, 300 - and 400 -level noncluster courses are of broad interest to many different majors throughout the Univer-
sity as well as to psychology majors. And third, 400-level cluster courses are designed for psychology majors but also are open to other students who fulfill the prerequisites.

All cluster courses require Psy 301 and Psy 302 or some equivalent methodological background, or the instructor's consent for enrollment. The cluster courses are so called because they are organized into specialty groups to help the student organize a curriculum. This organization and other aids for planning a curriculum are more fully explained in an undergraduate handbook for psychology majors which is available in the Department of Psychology (131 Straub Hall).

The following courses have been approved for satisfaction of the social science and science group requirements which partially fulfill the graduation requirements for all University undergraduates:
Social Science. Psy 201, 214, 215, 216, 301, 351, 353, 357, 361, 374, 383, 388, $411,413,415,417,419,421,423,425$, $427,456,457,458,462,466,467,470$, 472, 473, 475, 476, 478, 485, 487, 488, 489, 490, 491, 492.
Science. Psy 211, 212, 213, 217, 218, 219, 302, 430, 431, 432, 433, 434, 436, $437,438,439,442,443,445,447,448$, 449, 450.
Major Requirements. The psychology department has recently revised its major requirements. Students who became psychology majors prior to fall term 1977 have the option of graduating under either the old requirements or the new requirements. Students who became psychology majors fall term 1977 or after must fulfill the new requirements.
Old Major Requirements. A minimum of 36 credit hours in psychology courses, including at least 24 upper-division hours, is required of all psychology majors. At least 12 of the required upper-division hours must be taken at the University of Oregon. Mth 425 and/or 426 (or, alternatively, Mth 441 and/'or 442) may be included in the 24hour upper-division requirement. Of the 36 credit hours used to satisfy the major requirement, at least 24 must be taken on a graded basis. Eighty-five per cent of all work completed and graded must be passed satisfactorily.
Neze Major Requirements. A minimum of 36 credit hours in psychology courses including at least 24 upper-division hours is required of all psychology majors. At least 12 of the required upper-division hours must be taken at
the University of Oregon. Mth 425 and/or 426 (or, alternatively, Mth 441 and/or 442) may be included in the $24-$ hour upper-division requirement. The 36 hours will include Psy 301 (Research Methods), Psy 302 (Quantitative Methods), or other appropriate methodological preparation, and a course from three of the five 400 -level clusters. These clusters are: PhysiologicalEthology; Human Experimental Psychology ; Developmental Psychology ; Social Psychology; and Personality-Psychopathology. At least one of the cluster courses must be from those giving science credit (Physio-logical-Ethology or Human Experimental) and at least one from those giving social science credit (Developmental, Social, or PersonalityPsychopathology). Of the 36 credit hours used to satisfy the major, at least 24 must be taken on a graded basis. A course in which a student receives a D grade can not be used toward satisfying the major requirement of a minimum of 36 passing hours. The required 36 hours must be passed with the grade of P or C or better. Eighty-five per cent of all psychology work completed (excluding work receiving I, X, or Y) must be satisfactorily passed. It is recommended that prior to taking 301 and 302 the major have either Psy 201 or two other 200-level courses : one from the social science list $(214,215,216)$ and one from the science list $(211,212$, 213).

Psy 301 and 302 , or other appropriate methodological preparation (or instructor's consent), are prerequisites for all cluster-level 400 courses and should be taken prior to taking any of those courses. In addition, students should examine prerequisites for all 400 -level courses carefully.
Planning a Program. The Department of Psychology wants to develop habits of self-study and independence among its majors. Careful observation of one's own behavior and mental processes and the behavior of others is basic to an understanding of psychology. To help the student develop personal skills and practice them outside of formal classroom assignments, the department has developed an Inquiry Training program consisting of self-study experimental and observational modules using computers and TV tapes to aid the instruction. Information on this program is available in the Undergraduate Labs, Straub Hall rooms 170-179, and in the Undergraduate Resource Room, 141 Straub Hall.

The departmental requirements for a psychology major are designed to maxi-
mize individual curriculum planning. This should be done with close and frequent consultation with the adviser. There are four major options available within the general departmental requirements. These include an honors curriculum, a professional curriculum, a secondary teaching curriculum, and a liberal arts curriculum.
Honors Curriculum. Students with good records who plan to pursue a career in psychology may consider applying to the departmental Honors Program at the end of their sophomore year. The Honors Program centers around an independent research project which the student develops and carries out under the supervision of a departmental committee. Information about admission criteria and how to apply are available from the department.
Professional Curriculum. The professional curriculum is designed for those not planning to do graduate work in psychology, but who might want to work in Counseling Social Work, School Psychology, or Industrial Psychology, or who plan to enter into government or business after graduation and want to be prepared to apply their psychological knowledge in an administrative capacity. It stresses a broad knowledge of psychology plus experience in a variety of different settings. in which psychology is applied. Special emphasis is upon statistics, writing, computer programming, and other skills which will make the prospective student a more attractive job candidate or will give him an advantage once he begins to work.

Of special importance are opportunities to work on applied psychological projects or papers. These opportunities can be gained through special seminars (407), tutorials, reading, or research. The student should have prepared a number of papers applying psychology in real life settings by time of graduation. The exact curriculum designed will depend upon the setting or the department in which advanced study is sought. Some settings in which psychology is applied are: Education, Welfare-Social work, Youth work, Industry, and Mental Health. Psychology courses that may be especially appropriate for certain settings are: Education: 374, 388, 417, 421, 423, 434, 437, 470, 472, 475, 476, 478, 487-8-9; Welfare-Social Work: $384,388,411$, $417,427,456,457,462,470,473,487-8-$ 9 ; Youth Work : $374,383,388,417$, 421, 423, 473, 475, 476, 478; Industry : 353, 417, 419, 436, 462, 470, 487-8-9; Mental Health: 383, 388, 411, 413, 417, $427,445,462,466,467,470,472,473$,

487-8-9: many seminars (407) are also appropriate.
Secondary Teaching Certificate. For basic certification as a teacher of social studies in Oregon high schools, the Teacher Standards and Practices Commission requires completion of an approved teacher education program which includes satisfaction of (a) certain requirements in subject-matter preparation for the teaching endorsement, (b) certain requirements in professional education preparation, and (c) the recommendation of the institution at which the student completes the preparation.

For details of this program, consult the norm adviser for teacher education in the Department of Psychology and the Office of Secondary Education in the College of Edication. The subject matter content for the psychology norm requirement includes work in the science and social science areas of psychology as well as work in four additional social science fields.

The University will recommend students for the standard teaching certificate and standard endorsements upon their successful completion of a planned program of advanced teacher education ; this plan must be filed with the Office of Teacher Certification in the College of Education at the time the work is initiated. Completion of work required for a master's degree does not satisfy requirements for either the Standard Teaching Certificate or endorsement, unless the degree work also includes certificate and endorsement requirements. Program planning forms and information relating to the University's Standard teacher education program may be secured from the Office of Teacher Certification.
Liberal Arts Curriculum. Some students are interested in studying psychology with a view toward understanding the diversity of human nature, its relation to literature, science, and the arts, and its contribution to general intellectual currents. They will want to de-emphasize technical skills in giving tests, running experiments or analyzing data, and place strong emphasis on the theories and ideas which serve as a background for research. It is difficult to design any single advisory curriculum for such students. However, the curriculum should combine psychology with a strong emphasis on work in the humanities and with courses in science which stress its relation to philosophy and human concerns. Different courses would, of course, be advisable in programs which stress the relation between psychology and the natural sciences.

For further information the student should consult the Psychology Undergraduate Handbook.
Preparation for Graduate Study. A baccalaureate degree is seldom sufficient qualification for professional work in psychology; even the simpler professional positions require at least a master's degree. Students should not undertake graduate work unless their grades in undergraduate psychology and related courses have averaged better than $B$.
Prospective graduate students in psychology are advised not to take a large number of psychology credits beyond the minimum of 36 , leaving time for work in related fields such as anthropology, biology, computer science, chemistry, mathematics, physics, and sociology. Strong preparation in quantitative methods is advisable and might include statistics from mathematics. A reading knowledge in at least one foreign langiuge appropriate to psychology (German, French, Russian, Japanese) may be useful.

Gradliate Studies
Thie department emphasizes graduate work leading to the degree of Doctor of Philosophy. It also awards the degrees Master of Arts and Master of Science primarily, though not exclusively, to those students working toward a Ph.D. A terminal master's program for a linited number of students is available. The four major graduate programs are: general experimental; physiological, which emphasizes an interdisciplinary program in cooperation with the Department of Biology ; clinical; and developmental-social-personality. The department maintains a general experimental laboratory, animal laboratories, and a psychology clinic, as well as several other specialized facilities.
All students applying for admission for graduate work in psychology must provide scores on the Graduate Record Examination, verbal and quantitative scbires, and three letters of recommendation of special forms provided by the department; Detailed information on admission, intcluding application forms and information on awards and assistantships, may be obtained from the department.
During the first year of graduate work, students acquire a broad background in psychology and an introduction to research. The student's specific program is planned in relation to prior background, current interests, and future goals. A thesis is required for all
advanced degrees. Research experience is required of all Ph.D. candidates; teaching experience is recommended, and opportunities to teach are made available. For general regulations governing graduate work at the University, see the Graduate School section of this catalog.
Clinical Program. A research-oriented approach to theories and methods of clinical psychology is taken by the Department of Psychology. A clinical psychologist, in the view of the department, is a behavioral scientist with an area of specialization in clinical psychology. As a part of the graduate training, the student learns to devise approaches to clinical problems which lead to a better conceptual understanding of the phenomena under study. The program stresses a data-oriented approach to the complexities of clinical problems. During the first and second years of graduate study the student completes (1) the core program, including work in experimental psychology and quantitative methods, as do students in all other programs, (2) a pro-seminar in clinical research topics, and (3) a clinical core sequence in assessment and in behavior change, with an associated practicum. The second-year practicum experience, as well as advanced-level clinical-research training, is provided in large part through the Psychology Clinic, a training clinic operated by the clinical staff and students.

Beyond the second year, there is considerable latitude in planning a program of study and research. The student must pass a major clinical preliminary examination (covering assessment, psycliopathology and behavior change) and a minor preliminary examination in an area of special interest to the student (e.g., learning approaches to behavior change, social psychology, etc.).

Upon completion of formal course work and practica, students are required to take a one-year clinical intership to round out their professional training.

## Undergraduate Courses

Note : Not all courses will be offered every academic year.
Psy 199. Special Studies. 1-3 credit hours. Psy 200. SEARCH. 1-3 credit hours. No-grade course.
Psy 201. Introduction to Psychology. 4 credit hours. A one-term integrated introduction to psychology based on lectures and laboratory exercises. The course deals with perception, learning, thinking, development, social behavior, motives and emotion, and both the normal and abnormal personality. The course provides an overview of modern
psychology in terms of both biological and social factors.
Psy 211. Sensation and Perception. 4 credit hours. Consideration of how the various sense organs work and how sensory information is organized into knowledge about the world around us.
Psy 212. Learning, Thinking, and Condi-
tioning. 4 credit hours. Modern behaviorism emphasizing both the practical role that reinforcement and punishment play in the control of behavior and theoretical conceptions of the learning process; information processing conceptions of learning including the study of memory and attention; psycholinguistics or other complex cognitive processes such as thinking and creativity.

## Psy 213. Introduction to Physiological

Psychology. 4 credit hours. Explores relationships between activity of the nervous and endocrine systems and behavior. Topics typically covered include sensation, perception, consciousness, sexual behavior, eating and drinking, sleeping and dreaming, learning, and special properties of the human brain. No prerequisite.
Psy 214. Personality. 4 credit hours. Nature and organization of personality, normal and abnormal ; individual differences ; psychometric and behavioral assessment.
Psy 215. Developmental Psychology. 4 credit hours. Growth of individual and social forms of behavior (mainly in humans) ; intelligence ; motor behavior ; perception, learning and other cognitive functions; motivation and emotion.
Psy 216. Social Psychology. 4 credit hours. Attitudes and beliefs; social perception and judgment; communication; social interaction and group influences on behavior ; aggression, altruism, and conformity.
Psy 217, 218, 219. Introduction to Experimental Psychology (Honors College). 4 credit hours each term. An integrated lecture-laboratory course designed to acquaint the student with the fundamental concepts and facts in perception, learning, and motivation. Open to selected stuḍents outside Honors College through permission of instructor. Enrollment limited to twenty to twenty-five.
Psy 301. Research Methods in Psychology. 4 credit hours. A general introduction to research methods used in the various areas of psychology. The use of library and bibliographic methods, handling of survey data, coding from literary and tape sources, interviews, questionnaires, tests, and experiments are the methods to be introduced and used by students. This course will be required for all upper-division cluster-area courses and is required for psychology majors. Prerequisite : Psy 201; or one course from Psy 211, 212, or 213 and one course from Psy 214, 215, or 216 ; or Psy 217 and 218.
Psy 302. Quantitative Methods in Psychology. 4 credit hours. Introduction to probability and statistics as applied in psychological research. Topics covered include hypothesis testing, correlation and regression, and introduction to design of experiments. Required of psychology majors. Prerequisite : Mth 95.
Psy 351. Motivation. 3 credit hours. Conceptions of motivation ; human and animal research on instinct, arousal, motivational physiology, learned motives, conflict and stress, and organization of dispositions.

## Psy 353. Psychology of Work. 3 credit

 hours. Factors that influence human efficiency and the motivation to work. Topics include : boredom, fatigue, aging, incentives, working environment, decision-making, design of man-machine systems, achievement motivation, and social influences.
Psy 357. Pseudopsychologies. 3 credit
hours. Pseudopsychologies refers to a vaguely defined and poorly bounded set of systems, beliefs, and practices. They include astrology, I Ching, faith healing, water divining, ouija, Sciehtology, meditation systems, sensitivity and encounter groups, flying saucer cults, Bermuda triangle believers, certain alleged psychics, etc. The course discusses means of evaluation of the various systems and offers reasons why much of the evidence and claims put forth in support of pseudospychologies cannot be accepted. The many ways that the mind can be deceived or deceive itself are the major focus of this inquiry.
Psy 361. Psychology of Visual Art. 3 credit hours. A general introduction to the interrelationships between the psychology of perception and the pictorial arts. The course will survey the perceptual, cognitive, and affective bases of pictorial art. Topics include the perceptions of space, color, form, the function of images, the effects of learning, anamorphic painting, cartoons and caricatures. Prerequisite : Psy 211 or consent of instructor.
Psy 374. Infancy. 3 credit hours. The development of infants from the time of conception to the age of two years. Topics include heredity and prenatal development, birth, characteristics of the newborn, cognitive development, and the effects of early experience. Attention is given to individual differences in temperament and early interaction patterns of infant and caretaker. Prior course work in psychology is required.
Psy 383. Drugs and Behavior. 3 credit hours. Concerns the physiological and behavioral effects of psychoactive drugs such as alcohol, opiates, barbiturates, and excitants. Attention will be devoted to the psychology of use and overuse and therapies for correcting drug problems.
Psy 388. Human Sexual Behavior. 3 credit hours. The nature of human sexuality; hormonal, instinctual, and learned factors in sexuality ; psychosexual development ; frequency and significance of various types of sexual behavior ; sexual inadequacy ; homosexuality; sexual deviation.
Psy 400. SEARCH. 1-3 credit hours. No-grade course.
Psy 401. Research. Credit hours to be arranged.
Psy 403. Thesis. Credit hours to be arranged. Psy 405. Reading and Conference. Credit hours to be arranged.
Psy 406. Field Studies. Credit hours to be arranged.
Psy 408. Laboratory Projects. Credit hours to be arranged.
Psy 409. Practicum. 1-3 credit hours any term. No-grade course.

## Upper-Division Courses Carrying Graduate Credit

Note: Not all courses will be offered every academic year.
Psy 407. Seminar. (g) Credit hours to be arranged. Opportunity for small groups of students to pursue fur ther the subject matter of an upper-division course or to explore in depth a specific topic arising out of material covered in a course. The seminars offered vary from year to year depending upon interests and needs of students and upon availability of faculty. Typical subjects are:

Psycholinguistics.
Problem-solving.
Color Vision.
Activity and Rest.
Cognitive Development.
Behavior Modification.
Social Cognition.
Socialization.
Psy 410. Experimental Course. (G) Credit hours to be arranged.
Psy 411. Theories of Personality. (g) 3 credit hours. A description of the main phenomena of personality and a critical comparison of the outstanding conceptual systems that have been developed to account for these phenomena.
Psy 413. Humanistic Psychology. (g) 3 credit hours. An understanding and appreciation of the philosophy and theories of personality propounded by the major figures (e.g., Maslow, Rogers, Allport, Murray, Journard, Buhler) in the "Third Force" school of psychology; the differences in logical assumptions, research methods, and theoretical implications which distinguish humanistic psychology from behavioristic, psychoanalytic, cognitive, existential, and transpersonal theories of personality. Prerequisite : Psy 411, or consent of instructor.
Psy 415. Prejudice. (g) 3 credit hours. Examination of theory and research on the origins, maintenance, and modification of intergroup prejudice. Prerequisite: Previous courses in social psychology, or consent of instructor.
Psy 417. Environmental Psychology. (g) 3 credit hours. Examination of a wide range of topics having to do with the effects of the physical environment on human behavior, including mankind's use of space, population regulation, physical environment and development, and architectural design and behavior. Prerequisite : courses in social psychology, or consent of instructor,
Psy 419. Group and Individual Differences. (g) 3 credit hours. Basic principles for quantitative assessment of human characteristics ; research findings concerning intelligence, achievement, aptitudes, interests, and personality ; group differences related to sex, age, social class, race, nationality. Psy 302 , or equivalent, recommended as preparation for this course.
Psy 421. Psychobiological Development. (g) 3 credit hours. Early development of the young child and the young of other species. Developmental psychophysiology, ethological approaches, behavior genetics, prenatal development, effect of early experience, and aging. Consent of instructor is required. Prior courses in physiological or comparative psychology are required.
Psy 423. Psychological Aspects of Early Childhood Education. (g) 3 credit hours. An upper-division course designed to provide a broad survey of methods (both theoretical and practical aspects) of early childhood education. More important, the course is designed to teach the student to use psychological research techniques to evaluate the desirability and effectiveness of these methods. Prior courses in developmental or learning, or consent of instructor is required.
Psy 425. Psychology of Sex Differences.
(g) 3 credit hours. A broad view of the development of sex differences, considering biological differences, societal sex roles and sex-typing, personality theorists' view of the woman, and the differential status of girl and boy, man and woman throughout the life cycle. Prior courses in psychology are required.
Psy 427. Abnormal Psychology. (g) 3 credit hours. Various forms of unusual be-
havior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Nornal motives and adjustments considered in their exaggerations in the so-called neurotic person. Psy 302 is recommended as preparation for this course.

## Experimental Cluster:

Psy 430, 431, 432. Advanced Experimental Psychology. (G) 5 credit hours each term. Attempts an understanding of the functional operations of the human nervous system in perceiving, remembering, transforming, and responding to information; techniques of information theory, signal-detection theory, statistics, and computer control of experiments; laboratory work, data analysis, and experimental design integrated with substantive material. Consent of instructor is required. Prerequisite: Introductory Psychology, Statistics.
Psy 433. Psychology of Learning. (G) 3 credit hours. Survey of experimental and theoretical work on learning in animals and humans. Environmental and biological determinants of conditioning; symbolic learning and memory in humans.
Psy 434. Conditioning. (G) 3 credit hours. Experimental and theoretical literature on simple forms of learning. Habituation and sensitization, classical, instrumental, and operant conditioning ; biological constraints on learning.
Psy 436. Human Performance. (G) 3 credit hours. Unified approach to the complexities of skilled human performance. The capacities which the human being brings to the performance of motor and intellectual skills; limitations in human ability to sense, perceive store, and transmit information; experimental analysis of the flow of information within the human nervous system ; applications of performance principles to the study of manmachine systems. Prerequisite: Psy 302, or equivalent.
Psy 437. Cognitive Processes. (G) 5 credit hours. Issues of memory including coding for storage, control processes for storage, semantic memory, and retrieval of memory codes; attention and cognitive control; analysis of more complex cognitive tasks such as reading and sentence comprehension in terms of elementary cognitive processes; classical and modern approaches to problemsolving. Prerequisites: Psy 301, 302, and either 434 or 436.
Psy 438. Perception. (G) 3 credit hours. Survey of fundamental concepts of vision, audition, somesthesis, etc. Psychophysiological factors and psychophysical methodology.
Psy 302 strongly recommended as preparation.
Psy 439. Perception Laboratory. (G) 3 credit hours. Laboratory work in design, conduct, and analysis of experiments in perception. Prerequisite : Psy 302.

## Physiological Cluster:

Psy 442. Animal Behavior. (G) 3 credit hours. Survey of ethology plus its relation to experimental psychology and the biological sciences. Areas include: evolutionary and comparative foundations, sensory-motor integration, neural control of behavior sequences, interactions between motivational systems, neuro-behavioral development. Prerequisite: Bi 307 or equivalent.
Psy 443. Laboratory in Animal Behavior. (G) 2 credit hours. Laboratory experience with rats and monkeys. Prerequisite: Psy 302.
Psy 445. Brain Mechanisms of Behavior.
(G) 3 credit hours. The functional or ganization of the mammalian brain, including that of
man. Brain mechanisms of sensation, perception, arousal and vigilance, reproductive behavior, and memory. Prerequisite : previous work in biology or Psy 213.
Psy 447. Cellular Mechanisms of Behavior. (G) 3 credit hours. The physiological and biophysical properties of nerve cells which provide mechanisms underlying coordinated movement, sensation, perception, and certain aspects of motivation. Prerequisite : chemistry or physics.

## Psy 448. The Integrative Action of the

 Nervous System. (G) 3 credit hours.Concentration on the possible neural basis of higher brain functions such as selective attention, perceptual discrimination, pattern recognition, and motor control. Prerequisite : Psy 445 or 447.
Psy 449. Sensory Processes. (G) 3 credit hours. Cellular mechanisms of sensory reception and coding in the major mammalian sensory modalities. Prerequisite : Psy 447, Bi 414, or Psy 445.
Psy 450. Hormones and Behavior. (G) 3 credit hours. A consideration of the interactions among the brain, endocrine system, and behavior. Topics typically covered include sexual, parental, and aggressive-defensiye behaviors. Prerequisite : Psy 213 or equivalent work in Biology.

## Social Cluster:

Psy 456. Social Psychology I: Attitudes and Social Behavior. (G) 3 credit hours. Examination of the factors that lead to the development, maintenance, and modification of social attitudes and beliefs ; theory and research on human aggression, prejudice, and altruism examined in order to analyze the attitudinal and situational components of social behavior.
Psy 457. Social Psychology II: Group Processes. (G) 3 credit hours. Relationship of the individual to social environment, especially in participation in small groups; social perception and motivation as shown in the acquaintance process, power and dependence, roles in the group and the part played by the group in attitude change. Materials and issues treated in terms of basic psychological concepts. Psy 456 recommended.
Psy 458. Experimental Social Psychology Laboratory. (G) 3 credit hours. Research methods and problems in social psychology. Readings and coordinate laboratory problems in theory and research, experimental design, experimental methods, the social psychology of the individual, group influence upon individual behavior, social interaction, and group structure and membership. Students required to complete a minimum of two experiments either individually or with a subgroup. Prerequisite : Psy 456, 457, or consent of instructor.
Psy 462. Group Consultation. (G) 3 credit hours. Laboratory course in the study, evaluation, and modification of group processes. Emphasis on conceptualization of problemsolving groups as part of larger social systems, with particular attention to the analysis of constraints imposed by the larger system. Prerequisite: Psy 456 or 457 , Soc 430 or 431, or consent of instructor.

## Personality and Psychopathology Cluster:

Psy 466. Personality Research. (G) 3 credit hours. A review of current areas of personality research deriving from the leading conceptual models of individual differences; how knowledge about personality effects is generated; examination of organismic and situational influences on behavior; acquisition of
personality traits, development of self-concept, interpersonal perception, studies of modeling, and behavior change. Prerequisite : Psy 411 or equivalent.
Psy 467. Survey of Psychotherapeutic Methods. (G) 3 credit hours. Overview of the major models and methods of psychological treatment and their application in both community and institutional settings. Prerequisite : Psy 427, or equivalent, or consent of instructor.
Psy 470. Principles and Methods of Psychological Assessment. (G) 3 credit hours. Application of psychological methods to the study of the individual ; theoretical and statistical rationale of test construction and interpretation; problems involved in the prediction of human behavior ; survey of psychological assessment techniques. Prerequisite : Psy 302, or Mth 425, or equivalent.
Psy 472. Behavior Modification. (G) 3 credit hours. Description and critical analysis of the principles of behavior modification and their application to behavior problems in clinical, institutional, and community settings. Psy 473. Marriage. (G) 3 credit hours. A survey of the behavioral-science basis of dyadic interactions, emphasizing adult intimacy and love relationships in marriage. Focuses on clinical-counseling approaches to the study of marital interactions, including assessment, marital therapies, and evaluation of procedures designed to bring about changes in couples' relationships. Topics include models of marital adjustment, assessment of interpersonal relationships, especially marital interactions, therapeutic and educational approaches to relationship change, and evaluation of effectiveness.

## Developmental Cluster:

Psy 475. Cognitive Development. (G) 3 credit hours. Intellectual development in children ; classical and operant conditioning, memory, attention and concept formation; perceptual, motor, and language development. Prior courses in learning, or consent of instructor required.
Psy 476. Language Acquisition. (G) 3 credit hours. Studies and theories concerning semantic and syntactic development. Language acquisition discussed in the broader framework of the development of communication skills. Provides coverage in depth of an important area of child development covered only superficially in other courses. Prior courses in learning or developmental psychology, or consent of instructor required.
Psy 478. Child Socialization. (G) 3 credit hours. Socialization processes in infancy, childhood, adolescence, maturity, and old age. Emphasis on the development of attachments in infants, growth of identification, conscience and morality, importance of peer groups, role of family interaction, and the development of psychopathology. Prior courses in personality social, adnormal, or developmental psychology, or consent of instructor required.

## General Advanced Courses.

Psy 485. History and Systems of Psychology. (G) 3 credit hours. Survey of the development of modern psychology. Critical study of the comprehensive theoretical systems such as behaviorism, S-R psychology, Gestalt psychology, psychoanalysis and mathematical models, developed to help deal with the methodological and substantive problems of psychology. Prerequisite: 12 credit hours of upper-division psychologv.
Psy 487, 488, 489. Advanced Applied Psychology. 3 credit hours each. A year-long course covering theory and practice in the
application of psychology to problems of individuals, groups, and organizations. Emphasis on data-gathering and data-based interventions, based broadly on systems theory. Previous work in experimental, personality, and social psychology is highly desirable.
Psy 490, 491, 492. Honors. 1 credit hour each term.

## Graduate Courses

Note : Not all courses will be offered every academic year.
Psy 501. Research. Credit hours to be arranged. No-grade course.
Psy 502. Supervised College Teaching. Credit hours to be arranged. No-grade course.
Psy 503. Thesis. Credit hours to be arranged. No-grade course.
Psy 505. Reading and Conference. Credit hours to be arranged. No-grade course. Topics vary from year to year.
Psy 507. Seminar. Credit hours to be arranged. Seminrs offered vary from year to year, depending on faculty interests. Typical studies are:
Group Dynamics.
Social Influence.
Social Cognition.
Attitudes.
Language and Cognition.
Cognitive Development.
Socialization.
Human Performance.
Memory.
Perception.
Thinking.
Community Psychology.
Proseminars: Developmental ; PersonalitySocial; Clinical; Experimental; Physiological.

## Psy 508. Clinical Work with Children. 1-9

 credit hours. Work with deviant children and their families, emphasizing the behaviormodification approach. Enrollment for minimum of three consecutive terms. Prerequisite : course work in learning and behavior modification, and consent of instructor.Psy 509. Practicum. 1-9 credit hours.
Supervised work in assessment and treatment coordinated with didactic clinical core courses. Consent of instructor is required.
Psy 510. Experimental Course. Credit hours to be arranged.
Psy 511, 512, 513. Statistical and Quantitative Methods in Psychology. 3 credit hours each term. Application of basic concepts of probability and statistics to psychological problems. Use of probability theory in psychological theory construction; application of multivariate methods ; design of experiments. Prerequisite : Mth 425, or equivalent.
Psy 514. Learning. 3 credit hours. The capacities and functions involved in learning, storage, retrieval, and transformation of information in a variety of experimental situations. Discussion involved studies of classical and instrumental learning, skill learning, short- and long-term memory, classification and rule learning, problem solving, and language behavior. Prerequisite : Basic knowledge of experimental psychology, consent of instructor.
Psy 515. Perception. 3 credit hours. Factual knowledge and theory concerning sensory function and perceptual information processing.
Psy 516. Physiological Psychology. 3 credit hours. A survey of the fundamental aspects of brain-behavior relationships. Neuron physiology, sensory systems, nonspecific afferent
systems; emotion, motivation, and learning from neurophysiological viewpoint. Lectures and discussion.
Psy 517. Social Psychology. 3 credit hours. Current theory and research concerning the individual within a social context.
Psy 518. Developmental Psychology. 3 credit hours. Study of the development of the child's behavior and judgment from infancy to early adolescence. Topics include the development of conceptual ability, language, affectional and social behavior, aggression, imitation, and morality. Emphasis on cognitive development viewed from both learning theory and Piagetian frameworks.
Psy 519. Personality. 3 credit hours. Critical consideration of personality theory and research.
Psy 520. Psychopathology. 3 credit hours.
Problems in the definition and measurement of deviant behavior ; critical review of research literature on etiology, intervention, and outcome in psychoses, neuroses, and personality disorders. Prerequisite: Psy 427 or consent of the instructor.
Psy 524, 525, 526. Proseminar in Clinical Psychology. 1-3 credit hours each term. Survey of current issues and problems in clinical psychology with emphasis on the application of relevant research strategies. Required of first-year graduate students in clinical psychology. A no-grade course.
Psy 528. Assessment I: Psychological Testing. 3 credit hours. Theories and methods of objective psychological test construction, emphasizing logic of test construction, reliability, validity, and other psychometric problems. Prerequisite: Psy 512, or equivalent.

## Psy 529. Assessment II: Personality

Assessment, 3 credit hours. Theory, methods, and related research in approaches to personality assesment, including projective and objective methods. Prerequisite : Psy 512, or equivalent, and Psy 528.
Psy 530. Assessment III : Assessment of Cognitive Functions. 3 credit hours. Intensive study of selected clinical decisionmaking situations requiring information about cognitive functioning. Includes a practicum with neurologically damaged individuals. Prerequisite: Psy 528 and 529, or equivalent.

## Psy 531. Behavior Change I: Interview

 Therapies. 3 credit hours. Comparative review of the major systems of individual psychotherapy. Required of second year clinical graduate students; for other students, consent of instructor is required.Psy 532. Behavior Change II: Behavior Modification. 3 credit hours. Selected topics of the experimental and theoretical basis of behavioral modification techniques and issues related to their application. Course goals: (1) To familiarize the student with extant procedures and their origins in experimental psychology ; (2) to indicate strengths and limitations of these techniques; and (3) to suggest specific problem areas requiring research exploration. Required of secondyear clinical graduate students; for other students, consent of instructor is required.
Psy 533. Behavior Change III: Child and Family Therapy. 3 credit hours. Selected approaches to the conceptualization of modification of deviant child behaviors, particularly in the family setting; emphasis on interpersonal and operant approaches to child and family therapy. Required of second-year clinical graduate students; for other students, consent of instructor is required.
Psy 535. Advanced Social Psychology. 3 credit hours. Social behavior in relation to current psychological theory and research.

Psy 537, 538, 539. Advanced ClinicalResearch Practicum. 1-9 credit hours each term. Specialized work with particular clinical problems (e.g., depression, self-control, etc.), focusing on the development of testable hypotheses about the phenomena. Students work in small teams with the clinical staff in an attempt to generate systematic assessment and treatment approaches.
Psy 546. Multivariate Methods in Psychology. 3 credit hours. Theory and application to psychology of factor analysis and other multivariate methods. Prerequisite : Psy 512 or equivalent.

# Religious Studies 

Faculty

J.T. Sanders, Ph.D.. Department Head, Professor of Religious Studies (biblical studies). B.A., Texas Wesleyan, 1956; M.Div., Emory, 1960 ; Ph.D., Claremont, 1963.
Hee-Jin Kim, Pl.D., Associate Professor of Religious Studies (Oriental religions). B.A., 1957, M.A., 1958, California ; Ph.D., Claremont, 1966.
Stephen Reynolds, Ph.D., Associate Professor of Religious Studies (history of western religious thought). B.A., Princeton, 1958 ; M.A., 1963, Ph.D., 1966, Harvard.
G. Douglas Straton, Ph.D., Professor of Religious Studies (philosophy of religion and ethics). B.A., Harvard, 1938; B.D., Andover Newton, 1941 ; Pl.D., Columbia, 1950.

## Faculty Emeriti

Paul B. Means, Ph.D., Professor Emeritus of Religious Studies. B.A., Yale, 1915 ; B.Litt., Oxford, 1923; Ph.D., Columbia, 1935 ; at Oregon since 1941.

The Department of Religious Studies, which was established at the University in 1934, seeks to acquaint students with the religious beliefs and practices of the world's major religions. The department does not represent the viewpoint of any religious group, nor does it acknowledge any religion to be superior to others.

The study of religion at the University of Oregon involves a study of the history and philosophy of religions. Courses examine the origins, sacred texts, rituals and practices, beliefs, and subgroups of the world's major reli-
gions. The courses offered are intended to provide a broad understanding of the nature and role of religion in the world's different cultures, both present and past, for students in all fields, as well as integrated programs for majors in religious studies.

Recent graduates in religious studies who have not continued their studies of religions beyond the baccalaureate have entered those pursuits normally open to graduates in the various liberal arts, including public school teaching. Many graduates, however, have chosen to enter a graduate program in religious studies.

The department annually sponsors a Distinguished Visiting Lecturer's program, which brings outstanding scholars in various fields of religious studies to the campus for several days of lectures and meetings.
Major in Religious Studies. The department offers both a general and a specialized major. Any student may choose either track, but students planning to teach in public schools and to qualify for a secondary social studies norm endorsement are advised to follow the general track; students planning on graduate school, research, and college or university teaching are advised to follow the specialized track.

Major requirements. All students :
R 201,202, 203. General track : three of the following: R 301, 302, 303, 306, 307 ; all of the following: $\mathrm{R} 311,312$, 313; recommended: Soc 461 and two of the following : R 419, 420, Ph1 439, 440. Specialized track: One of the following four "Focus Areas":
I. Ancient Near Eastern and Mediterranean Religions: four of the following: R 304, 305, 311, 312, 313; two of the following: R 440, 441, 442; any course numbered $\mathrm{R} 405,406,407$,

408, 410, CL 405, 406, 407, 408, 410, Hst 405, 406, 407, 408, or 410 in the subject field; recommended: ArH 411, 412, 413, 414, 415, 416, CL 321, Hst 207, 411, 412, 413, Phl 301, 302.
II. History of Christianity : four of the following: R 313, 321, 322, 323, 324, 325 ; two of the following: Hst 432, any course numbered R 405, 406, 407, 408, 410, Hst 405, 406, 407, 408, or 410 in the subject field; recommended: ArH 421, 422, 423, 424, 425, 426. Hst 421, 422, 423.
III. Asian Religions: R 301, 302, 303 ; three of the following : R 230, 330 , 331, 430, 431, any course numbered R $405,406,407,408$, or 410 in the subject field; recommended: ArH 464, 465, 466, 467, 468, 469, Chn 461, Hst 291, 292, 494, 495, 497, 498.
IV. Philosophy of Religion and Theology : R 419, 420; four of the following : R 421, 423, 424, 425, Phl 204, 439, 440; recommended: Ph1 301, 302, 303, 323, $324,438$.

All students: eighteen additional hours in Religious Studies, nine hours of which must be upper-division. Certain courses in other departments may be applied toward the satisfaction of this eighteen hours (a list of such courses is maintained in the department). All required courses must be taken on a graded basis.
The best high school preparation for an undergraduate program in religious studies is a good general grounding in the social sciences and in literature.

In those courses taken toward the satisfying of major requirements, $D$ will normally not be considered a passing grade ; however, under special circunstances, D may be accepted as a passing grade in no more than one course taken toward the satisfying of major requirements.

A sample program for the first two years might be:
Freshman Year

| Fall | Credits | Winter | Credits | Spring | Credits | Fall | Credits | Winter | Credits | Spring | Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R 201 | 3 | R 202 | 3 | R 203 | 3 | PE | 1 |  | 1 | Elective | 3 |
| PE | 1 | PE | 1 | PE | 1 | Foreign lang. (or Arts \& |  | Foreign lang. (or Arts \& |  | Foreign lang. 4 |  |
| Wr 121 | 3 | HE | 2 | Wr 123 | 3 |  |  | (or Arts \& |  |
| Mth 101 or |  | Mth 102 or |  | Mth 156 or. |  | Letters phil. 3) |  |  |  | Letters phil. 3) |  | Letters phil. 3) |  |
| Science | 4 | Science | 4 | 157 or Sci. | 3-4 | R 3-- sequence 3 |  | R 3-- sequence 3 |  | R 3-- sequence 3 |  |
|  |  |  |  |  |  | Psy 211 or |  | Psy 212 or |  | Psy 213 or |  |
| Geol 101 |  | Geol 102 |  | Geol 103 |  | Soc 201 | 3-4 | Soc 429 | 3-4 | Soc 461 | 3-4 |
| Anth 101 |  | Anth 102 |  | Anth 103 |  | Hst 101 or |  | Hst 102 or |  | Hst 103 or |  |
| $\mathrm{Ph}^{104}$ |  | Ph 105 |  | Ph 106 |  | Science | 3-4 | Science | 3-4 | Science | 3-4 |
| Foreign lang. (or lit. | $\begin{aligned} & 4 \\ & 3) \end{aligned}$ | Foreign lang. (or lit. | $\begin{aligned} & 4 \\ & 3 \\ & 2 \end{aligned}$ | Foreign lang. (or lit. | $\begin{aligned} & 4 \\ & 3 \\ & \hline \end{aligned}$ |  | 13-16 |  | 13-16 |  | 15-18 |
|  |  | Elective |  | Elective |  |  |  |  |  |  |  |
|  | 14-15 |  | 16-17 |  | 16-18 |  |  |  |  |  |  |

Honors in Religiouts Studies. Requirements for honors: (1) satisfaction of the requirements for a major, (2) a cumulative grade point average of 3.5 in courses taken toward the satisfaction of the major requirement, and (3) satisfactory completion of an honors thesis. The candidate for honors will normally register for 3 credit liours of R 401 in the winter term of the senior year in order to prepare for the writing of the thesis, and for 3 credit hours of R 403 during the spring term, during which time the thesis will be written. A faculty committee of two will supervise the thesis project. A first draft of the thesis must be submitted six weeks before the end of the term in which the student expects to graduate, and the final draft four weeks before the end of the term.

## Undergraduate Courses

R 199. Special Studies. 1-3 credit hours. Topics of study to be arranged.

## R 200. SEARCH. 1-3 credit hours.

R 201, 202, 203. Great Religions of the
World. 3 credit hours each term. Introduction to the study of Hinduism, Buddhism, Confucianism, Taoism, Shinto, Zoroastrianism, Judaism, Christianity, and Islam ; the philosophy of these religions as shown in their classic scriptures ; concluding resumé of their present organization and major divisions; analysis of their world views and conceptions of God, nature, humanity, ethics, human destiny, and salvation. R 202 prerequisite to R 203. Straton, Reynolds.
R 230. Varieties of Eastern Meditation. 3 credit hours. An introduction to the classical yogic/meditational methods and philosophies of various Eastern religious traditions. Kim.
R 301. Religions of India. 3 credit hours.
The Indus Valley Civilization; the Vedic religion and Brahmanism ; Jainism and Buddhism; rise of sectarian Hinduism and its medieval developments ; Sufism in India; Sikhism; Hinduism and the modern world. Primary emphasis on the Hindu tradition.
Kim.
R 302. Chinese Religions. 3 credit hours.
The prehistoric roots of Chinese religion;
Confucius and his followers; philosophical
Taoism, Han Confucianism; religious
Taoism; Chinese Buddhism; Neo-Confucianism ; religion in China today. Kim.
R 303. Japanese Religions. 3 credit hours. Early Shinto and its developments; Japanese Buddhism ; transformation of Taoism and Confucianism ; medieval Shinto; religion in the Tokugawa period; Nationalistic Shinto; folk religion; New Religions. Kim.
R 304. Ancient Near Eastern Religions. 3 credit hours. Study of the principal religious concepts and practices of the civilizations of the Ancient Near East: Egypt, Mesopotamia, Asia Minor, Persia, and Israel. Sanders.
R 305. Ancient Mediterranean Religions. 3 credit hours. Religions of ancient Greece and Rome, including the Hellenistic period, and the beginnings of Christianity. Sanders.
R 306. Judaism and Christianity since C.E.
70.3 credit hours. Study of post-Biblical
developments in Judaism and Christianity, including the rise of Talmudic Judaism; medieval Jewish philosophy and mysticisnı, and modern developments, especially the Enlightenment and Zionism; the separation of Christianity from Judaism and the appearance of Christian Hellenism; the patristic synthesis; the East-West rift in Christianity and the medieval reform movements; the Reformation ; post-Reformation Christendom. Reynolds.
R 307. Religions of the Islamic World. 3 credit hours. Study of the rise of Islam and its extension in Asia and Africa; Muslim theology, philosophy, and mysticism ; the transition to the modern nation-state and recent developments in Islam. Attention will also be given to non-Muslim religious communities within the Muslim world. Reynolds. R 311, 312, 313. The Bible and Ancient Civilization. 3 credit hours each term. Survey of the major religious ideas of the Bible, including Apocrypha and New Testament. Fall : law, covenant, and salvation history ; winter: prophecy and wisdom; spring : apocalyptic opposition to law, the emergence of gospel, varieties of gospels. Sanders.
R 321, 322, 323. History of Christianity. 3 credit hours each term. The course of Christian history in East and West ; the relations between spirituality, doctrine, and institutional forms. Fall : from the New Testament period to the Iconoclastic Controversy ; winter : the Middle Ages, the schism between East and West, and the reform movement in the West ; spring : the Reformation, and the modern period. R 322 and 323 offered in alternate years. Reynolds.
R 324, 325. History of Eastern Christianity. 3 credit hours each term. Winter : the church in the Eastern Roman Empire and its expansion in Europe ; the eastern churches and Islam. Spring : the eastern churches from the fifteenth century to the present. Prerequisite: R 321 , or equivalent. Offered in alternate years. Reynolds.
R 330, 331. Buddhism and Asian Culture. 3 credit hours each term. Study of the beliefs, symbols, values, and practices of Buddhism. Winter: Theravada Buddhism ; Spring: Mahayana Buddhism. Offered in alternate years. Kim.
R 400. SEARCH. 1-3 credit hours.
R 401. Research. Credit hours to be arranged. R 403. Thesis. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

R 405. Reading and Conference. (g) Credit hours to be arranged.
R 406. Special Problems. (g) Credit hours to be arranged.
R 407. Seminar. (g) Credit hours to be arranged.
R 408. Colloquium. (g) Credit hours to be arranged.
R 409. Practicum. (g) Credit hours to be arranged.
R 410. Experimental Course. (g) Credit hours to be arranged.
R 419, 420. Philosophy of Religion. (g) 3 credit hours each term. Religious concepts of reality and human nature. Fall: method in philosophy of religion, major ideas of Deity, patterns of reasoning concerning God as personal being, the problem of evil ; winter : idea of human being as spiritual, moral, and
religious beings in the light of other philosophies of humanity. Straton. Not offered 1978-79.
R 421. Contemporary Social Problems and Religion. (g) 3 credit hours spring. Religious ideas of ethical duty ; the New Testament and ethical problems, the ethics of the family and sexuality, of race, of the political and economic orders; the concepts of history and human destiny in Judeo-Christian thought. Straton. Not offered 1978-79.
R 423, 424, 425. Contemporary Philosophies of Religion and Theological Movements. (g) 3 credit hours each term. A great books, seminar method of studv, with presentation of student papers toward end of each term. Fall : selected readings from major representatives of the traditions of Idealism and Emergentistic Naturalism in philosophy of religion. Winter : selected readings from representatives of Existentialism. Naturalism, and Personalism in philosophy of religion. Spring: selected readings from representatives of Mysticism, Death of God, and Situation Ethics movements in philosophy of religion. Straton. R 425 not offered 1978-79.
R 430. Zen Buddhism. (g) 3 credit hours. Study of some salient aspects of Ch'an/Zen Buddhism. Historical development; koan and zazen ; Zen classics ; enlightenment and philosophy; cultural impact. Offered in alternate vears. Kim.
R 431. Readings in Zen Classics. (g) 3 credit hours. Intensive study of selected Ch'an and Zen works in English translation, such as T'an-ching (The Platform Sutra), Lin-chi-lu (The Record of Lin-chi), Wut-men-kuan (The Gateless Gate), and Shobogenzo (The Eyetreasury of the True Dharma). Offered in alternate years. Kim.
R 440. Foundations of Biblical Ethics. (g) 3 credit hours. The basic ethical principles endorsed or proposed by biblical writers ; special attention to the deuteronomic law code, the prophets, Jesus, and Paul. Prerequisite: R 311, 312, 313 , or consent of instructor. Sanders. Not offered 1978-79.

## R 441. Recent Discoveries in Biblical

Studies. (g) 3 credit hours. The significance for biblical studies of recently found texts, such as the Dead Sea Scrolls and the Coptic Gnostic Library, and recent archaeological discoveries. Prerequisite: R $311,312,313$, or consent of instructor. Sanders. Not offered 1978-79.
R 442. Recent Developments in Biblical Theology. (g) 3 credit hours. The major writings in biblical theology that have been formative for the present generation. The most recent innovations and avant garde positions. Prerequisite: $\mathbf{R} 311,312,313$, or consent of instructor. Sanders. Not offered 1978-79.

## Romance Languages

## Faculty

William Calin, Ph.D., Department Head, Professor of Romance Languages (Medieval and Renaissance French literature, French poetry). B.A., 1957, Ph.D., 1960, Yale.
George Ayora, Ph.D., Associate Professor of Romance Languages (SpanishAmerican literature). B.A., 1962, M.A., 1964, Washington ; Ph.D., Vanderbilt, 1969.

Randi M. Birn, Ph.D., Professor of Romance Languages (contemporary French literature). Cand. Philol., Oslo, 1960 ; Ph.D., Illinois, 1965.
Françoise Calin, Ph.D., Assistant Professor of Romance Languages (modern French novel and poetry). License 1963, Diplôme d'Études Supérieures, 1964, CAPES, 1966, Sorbonne ; Ph.D., Stanford, 1972.
Henry F. Cooper, M.A., Senior Instructor in Romance Languages (French). B.A., Willamette, 1950 ; M.A., Middlebury, 1956.

David J. Curland, M.A., Senior Instructor in Romance Languages (Spanish). B.A., California, Los Angeles, 1950 ; M.A., Oregon, 1963.
Richard H. Desroches, Ph.D., Associate
Professor of Romance Languages
(18th-Century French literature). B.A., Clark, 1947 ; Ph.D., Yale, 1962. Sylvia B. Giustina, M.A., Instructor in Romance Languages (Italian). B.A., Marylhurst, 1956; M.A., Oregon, 1966.
Thomas R. Hart, Ph.D., Professor of Romance Languages (Spanish, Portuguese, Middle Ages, Renaissance). Editor, Comparative Literature. B.A., 1948, Ph.D., 1952, Yale.
Emmanuel S. Hatzantonis, Ph.D., Professor of Romance Languages (Italian language and literature). B.A., City College of New York, 1952; M.A., Columbia, 1953 ; Ph.D., California, 1958.

Robert M. Jackson, Ph.D., Associate Professor of Romance Languages (Spanish narrative) B.A., Dartmouth, 1963 ; M.A., 1964, Ph.D., 1968,
Harvard.
Enrique R. Lamadrid, Ph.D., Assistant Professor (Chicano, Spanish-American literature). B.A., New Mexico, 1970 ; M.A., 1976, Ph.D., 1978, Southern California.
Elisabeth A. Marlow, Ph.D., Assistant Professor of Romance Languages (French, 17th-century literature and civilization). Diploma, Hautes Etudes Commerciales, Paris; M.A., 1958, Ph.D., 1966, Oregon.

Barbara Dale May, Ph.D., Assistant
Professor of Romance Languages (modern Spanish poetry). B.A., 1972, M.A., 1973, Ph.D., 1975, Utah. Veronique Morrison, M.A., Visiting Instructor of Romance Languages (French language teaching). B.A., 1967, M.A., 1969, California, Los Angeles.
Louis A. Olivier, Ph.D., Assistant Professor of Romance Languages (18th-19th century French novel). B.A., 1962, M.A., 1963, Utah ; Ph.D., 1976, Johns Hopkins.
Perry J. Pozers, Ph.D., Professor of Romance Languages (Spanish Golden Age). B.A., Oregon, 1941 ; Ph.D., Johns Hopkins, 1947.
Steven F. Rendall, Ph.D., Associate Profesor of Romance Languages (French literature ; literary theory). B.A., Colorado, 1961 ; Ph.D., Johns Hopkins, 1967.
Wolfgang F. Sohlich, Ph.D., Associate Professor of Romance Languages (modern French poetry, theater). B.A., Johns Hopkins, 1959 ; M.A., 1970, Ph.D., 1971, Emory.

## Faculty Emeriti

Chandler B. Beall, Ph.D., Professor Emeritus of Romance Languages. B.A., 1922, Pl.D., 1930, Johns Hopkins ; at Oregon since 1929.
David M. Dougherty, Ph.D., Professor Emeritus of Romance L_anguages. B.A., Delaware, 1925 ; M.A., 1927, Ph.D., 1932, Harvard ; at Oregon since 1947.
Carl L. Johnson, Ph.D., Professor Emeritus of Romance Languages. B.A., 1924, M.A., 1925, Iowa; Ph.D., Harvard, 1933 ; at Oregon since 1935.
Leazitt O. Wright, Ph.D., Professor Emeritus of Romance Languages. B.A., Harvard, 1914 ; Ph.D., California, 1928; at Oregon since 1926.

The Department of Romance Languages offers instruction in French, Italian, and Spanish language and literature. The miajor in Romance Languages is a liberal arts major. Although giving the necessary background for professional graduate work, it is not restricted to prospective teachers. Its purpose is to provide students with sound training in a humanistic discipline.

## Undergraduate Studies

Programs leading to undergraduate majors are provided in French, Italian, and Spanish. Students who major in the department are primarily concerned
with Romance literatures, literary history, and criticism. Attention is given to developing the skills of understanding, speaking, and writing the modern idiom. A fully equipped laboratory furnishes a valuable adjunct to classroom exercises. Those students who intend to do graduate work in Romance Languages are advised to begin a second Romance language and to take a year's work in Latin. Courses in English and other literatures are also recommended. One of the goals of the department is to give students a general view of the culture of the countries where Romance Languages are spoken. Courses in culture and civilization are offered, and an academic-year program is offered in France, at the University of Poitiers, and summer programs are organized in Italy (at the Italian University for Foreigners in Perugia) and in Mexico (at the University of Guadalajara) or Spain.
High School Preparation. In preparation for a course of study leading to a major in Romance Languages, we recommend:
(1) As much work as possible in French or Spanish, or both.
(2) A knowledge of European or Latin American history and geography.
(3) Familiarity with literature in any language which will help acquire critical tools useful in advanced study of a Romance literature.
(4) Communication skills, speech and essay or theme writing. These skills will enable the student to convey ideas logically. In literature courses, papers or essay exams are generally required.
Career Opportunities. Students who graduate with a B.A. degree in Romance Languages enter a wide variety of occupations. Teaching of the language is one of the more obvious possibilities. Recently, however, the knowledge of a foreign language in combination with other studies, such as business administration, international relations, journalism, etc., has been opening careers in overseas business, government foreign service, travel agencies, airlines, communications media, libraries, publishing houses, church and philanthropic organizations, and social work agencies. Positions include translator-interpreter, importerexporter, and diplonnatic officer.

Major requirements for the Bachelor of Arts degree are set forth below. (Courses passed with the grade of $D$ normally will not be counted toward the fulfillment of major requirements.)
Romance Languages. Thirty credit hours in one language beyond the
second-year sequence, of which at least 9 hours must be in literature and 9 hours in composition and conversation (the students whose concentration is in French must have 18 hours of literature, normally to include the Introduction to French Literature), plus 15 hours beyond the second-year sequence in a second Romance Language.

## Model Program

The following program is typical of those taken by first-year students in Romance Languages:

| Course | Credits |
| :---: | :---: |
| A Romance Language (first, second or third-year level, depending on previous preparation) |  |
| An English writing course ................ | 3 hours |
|  | 4 hours |
| A social science ................................. 3 hours |  |
|  | 1 h |
|  | 15 hour |
| Other possibilities : |  |
| a second Romance Language | 4 hours |
|  | 3 hours |
| Health Education | 3 hour |

French. (1) RL 301, 302, 303, Introduction to French Literature, or the equivalent. (2) Thirty-six additional hours in upper-division courses. At least nine of these hours must be in courses of French composition. At least eighteen credit hours must be in literature courses. Additional work in related fields is recommended (e.g., another Romance language, English, history of of art, music, and philosophy).

Italian. Forty-five credit hours beyond the second-year sequence, which may be distributed as follows: (1) three terms of either Survey of Italian Literature (RL 307, 308, 309) or Introduction to Italian Literature (RL 377, 378, 379) ;
(2) three terms of Composition and Conversation (RL 374, 375, 376) ; (3) six terms of upper-division literature courses; (4) three terms of work in one or more related fields (e.g., another Romance literature, history, art history, etc.) to be determined in consultation with the student's adviser.

Spanish. Two major programs in Spanish are available: (A) one emphasizes the study of Spanish and Latin American literature, and (B) an alternative program for students with strong interests in the related fields of linguistics, the social sciences, and area studies.
(A) In the major with the literary emphasis, 45 credit hours of work beyond the second-year sequence, distributed as follows: (1) Introduction to
the Reading of Spanish Literature (RL 311 ) ; (2) three from the following: Medieval Spanish Literature (RL 312), The Golden Age (RL 313), Modern Spanish Literature (RL 314), Spanish-American Literature (RL 315 ) ; (3) Cervantes (RL 360); (4) five terms of Spanish, SpanishAmerican or Portuguese literature courses numbered 405 or above ; (5) three terms of composition and conversation : RL 347, 348, 349 or RL 461, 462,463 , or a combination of these ; (6) two terms of upper-division work in one or more related fields; e.g., art history, philosophy, or political science. (B) In the alternate major, 45 credit hours beyond the second-year sequence, distributed as follows: (1) Six terms of work in upper-division and advanced language classes: RL 350, 351, 347, $348,349,461,462,463$; (2) five terms of upper-division course work in literature, distributed as follows: (a) RL 311 ; (b) four from the following : RL 312, RL 313, RL 314, RL 315, RL 360 ; (3) four terms of upper-division work in related courses ; e.g., History of Spain, Hispanic America, History of Art, Art in Latin America, or Latin American geography, including culture and civilization in the department.

Minor requirements for the Bachelor of Arts degree are as follows.

Romance Languages: A minor in any of the Romance languages will consist of 15 hours beyond the second-year level in that language, normally to include three terms of composition and conversation plus two terms of literature.

Secondary School Teaching of Foreign Languages. The Department of Romance Languages offers a program leading to certification as a teacher of French, Italian, or Spanishi in junior or senior high schools. To be recommended by the University and the department for such certification, the student must satisfactorily complete the approved program for preparing secondary teachers which includes (1) subject matter content for the teaching specialty, essentially equivalent to major requirements in a single language, plus recommendation of the institution in which the preparation was completed, and (2) a professional education component. Candidates must also have a 3.0 GPA in the major and attain a 250 percentile score or better in the MLA proficiency test in order for the department to recommend them for student teaching and certification.

For detailed information, consult the Romance Languages department office, and the office of the College of Educa-
tion, Department of Curriculum and Instruction.

## Graduate Studies

The Department of Romance Languages offers programs of study leading to the degree of Master of Arts in Romance Languages (French, Italian, Spanish, or a combination), and to the degree of Doctor of Philosophy in Romance Languages. It is important that courses taken outside the department form part of a coherent program and have the approval of the adviser.
The graduate program in comparative literature is administered by a committee representing the departments of English, German and Russian, and Romance Languages ; it offers opportunity for advanced study of several literatures in their original languages.

The resources of the University Library for research in French, Italian, and Spanish are fully adequate for the department's graduate programs; in some fields they are outstanding. The Library's holdings of learned periodicals are extensive ; the quarterly journal, Comparative Literature, is edited by a member of the department.
The Master of Arts Program. Although the student normally takes work to improve linguistic skills, the M.A. is primarily a degree in the study of literature. Courses are offered in French, Italian, Portuguese, Peninsular and American Spanish languages and literatures; with major work available in French, Italian, and Peninsular Spanish. The student's program may include work in two of these fields, and must include a second field if one is Italian or Spanish-American literature. The minimum requirement for this degree is the completion of 45 credit hours of graduate study with grades of B or higher. The program does not include a thesis.

Alternative programs in French and Italian are available to M.A. candidates. Upon application to the graduate committee, the committee, with the advice and consent of the stuclent's adviser, may allow the student to take 56 units of courses and no examination. Students selecting this alternative must pass the Master of Arts examination before continuing toward the Ph.D.
Interdisciplinary Master's Program in French. The department supervises an interdisciplinary program designed particularly for the preparation of secondary school teachers. The program requires 36 credit hours of graduate work in French and a mini-
mum of 9 credit hours in education. For further information, consult the director of the program, Elisabeth Marlow.
Master of Arts in Teaching Spanish. The department offers a program of advanced study leading to the Master of Arts in Teaching Spanish, with emphasis on the preparation of secondary school teachers. In addition to a year's study at the University, this program includes an eight-week summer term in Mexico or Spain. The program is designed to afford prospective teachers of Spanish an opportunity to achieve competence in the written and spoken language, to study literature at the graduate level, and to develop and practice methods of presenting both language and literature to secondary school students. Completion of this course of study will fulfill the requirements for the Oregon Standard (five-year) Secondary Teacher Certificate, but courses in civilization and phonetics, required for this certificcate, should be taken prior to admission. The Doctor of Philosophy program permits the student to choose among a variety of approaches to advanced stucly in Romance literatures. Major fields of study include: (1) a national literature; (2) a period (e.g., the Renaissance) ; (3) a genre (e.g., the novel). Candidates must complete a minimum of 15 graduate courses, including at least three terms of work in the literature of one or more Romance languages other than the major, as well as two terms of work in philology or medieval literature. A comprehensive examination and a thesis are required. In addition to command of the languages and familiarity with the chosen literatures, the student is expected to develop skill in critical writing and competence in individual research. Students interested in the doctoral program should request the description of the program from the departmental secretary or consult with the director of graduate studies.
Overseas Study. The Oregon State System of Higher Education provides opportunities for a year's study in Poitiers, France. The program is administered by Oregon State University but students of the University of Oregon register with their home institution. While the program is primarily intended for undergraduates, some graduate credit may be obtained if proper arrangements are made with the Department of Romance Languages.

In addition, the University of Oregon offers an eight-week summer program in Perugia, Italy, and an eight-week program in Mexico.

## French

## Undergraduate Courses

RL 50, 51, 52. First-Year French. 4 credit hours each term. An introduction to French, stressing comprehension, speaking, reading, and writing with a modern approach through the use of a series of French educational films. Beginning with the winter term, one classroom hour is devoted to viewing color films which range over a wide cultural spectrum of French life. The remaining three classroom hours are devoted to discussion of the film script, grammar, elementary composition, and oral drill. Marlow, staff.
RL 53, 54. First-Year French. 6 credit hours each term, winter and spring. Covers in two terms the work of RL 50, 51, 52. For students who wish to begin French in the winter term. Persons whose competence in the language already exceeds the scope of this course will not be admitted.
RL 101, 102, 103. Second-Year French. 4 credit hours each term. Study of selections from representative authors; review of grammar ; considerable attention to oral use of the language. Special section for Honors College students and for the students who wish to concentrate on reading. Persons whose competence in the language already exceeds the scope of this course will not be admitted. F. Calin, staff.

RL 199. Special Studies. 1-3 credit hours.
RL 301,302,303. Introduction to French Literature. 3 credit hours each term. Study of representative works from the Middle Ages to the present. Each year this course will be organized around a theme. Prerequisite: Two years of college French or the equivalent. Staff.
RL 304, 305, 306. The French Novel. 3 credit hours each term. Study of selected novels from the 17 th century to the present. Offered in alternate years. Birn, F. Calin, Olivier.
RL 318. Contemporary French Theater. 3 credit hours. Study of major trends and movements in modern French drama. Offered in alternate years. Birn, Sohlich.
RL 319. Baudelaire, Verlaine, Rimbaud, 3 credit hours. Study of masterworks by three creators of the modern spirit in poetry; introduction to textual analysis. Offered in alternate years. F. Calin, Sohlich.

## RL 320. Short Fiction. 3 credit hours.

 Study of selected short fiction by such authors as Voltaire, Diderot, Mérimée, Maupassant, Camus, Aymé, Beckett, Robbe-Grillet. Some attention given to the evolution of the short story as a genre. Normally to be offered in alternate years in the spring term. Desroches, Rendall.RL 321, 322, 323. French Composition and Conversation. 3 credit hours each term. Exercisesin pronunciation, comprehension, and composition. Ample opportunity for conversation. Conducted in French. Prerequisite : two years of college French or equivalent. F. Calin, Desroches, Marlow, Morrison, Olivier, Rendall, Sohlich.

## RL 331, 332, 333. French Pronunciation

 and Phonetics. 2 credit hours each term. A thorough study of the fundamentals of French pronunciation, with special attention to each student's difficulties. Prerequisite : two years of college French or equivalent. Normally required of French majors and of candidates for teacher certification. Offered in alternate years. Craig and staff.RL 403. Thesis. Credit hours to be arranged.
RL 405. Reading and Conference. Credit hours to be arranged.
RL 409. Practicum. Credit hours to be arranged. Pass or No-Pass grade only.

## Upper-Division Courses Carrying Graduate Credit

Note: All listed courses may not be offered every year.
RL 407. Seminar. (G) 4 credit hours.
Several seminars are offered each term.
Recent topics: Late 19 th-century novel,
Diderot, Montaigne, Genet, Sartre, Molière, Racine, Preromanticism, Black African literature, Balzac.
RL 410. Experimental Course. (G) Credit hours to be arranged.
RL 411, 412, 413. Seventeenth-Century
French Literature. (G) 3 credit hours each term. Each term devoted to an intensive study of a problem, author, or genre. Recent topics : fictional technique in La Princesse de Cleies; Corneille ; La Rochefoucauld and the art of the Maxim. Prerequisite: RL 301, 302, 303. Marlow, Rendall.

## RL 417, 418, 419. Nineteenth-Century

French Literature. (G) 3 credit hours each term. Study of the literary movements and tna jor writers. Prerequisite: RL 301, 302, 303. F. Calin.

RL 423, 424, 425. Twentieth-Century
French Literature. (G) 3 credit hours each term. Study of major writers and movements. Prerequisite: RL 301, 302, 303. Birn, F. Calin, Sohlich.
RL 429, 430, 431. French Culture and
Civilization. (G) 3 credit hours each term.
The political and social backgrounds of French literature ; introduction to French music and art. Prerequisite: RL 301, 302, 303, or RL 321, 322, 323, or equivalent. Marlow, Olivier, Sohlich.

## RL 435, 436, 437. Eighteenth-Century

French'Literature. (G) 3 credit hours each term. Study of the origins and triumph of the philosophical spirit from Bayle to the Encyclopédic with emphasis on Montesquieu, Voltaire, Diderot, and Rousseau. Special attention to evolution of literary genres of novel and theater. Desroches, Olivier.
RL 467, 468, 469. Advanced French Composition and Conversation. (G) 2 or 3 credit hours each term. Translation of modern literary texts into French, and writing of original themes. Discussion of topics of a political, sociological or cultural nature taken from current issues of French magazines. Conducted in French. Normally required of French majors and of candidates for teacher certification. Prerequisite : RL 321, 322,323 or equivalent. Marlow.
RL 470. Text Explication. (G) 3 credit hours. Introduction to basic critical concepts and methods of explication ; intensive analysis of selected poetry and pros.e Offered in alternate years.

## Graduate Courses

Note: All listed courses may not be offered every year.
RL 503. Thesis. Credit hours to be arranged. A no-grade course.
RL 505. Reading and Conference. Credit hours to be arranged.
RL 507. Seminar. Credit hours to be
arranged. Recent topics have been:
Studies in French Poetry. W. Calin.
Montaigne. Rendall.
Diderot. Desroches
Eighteenth-Century French Novel. Desroches.
French Romantic Drama. Desroches.
The Portrayal of Women in the French
Novel 1750-1950.
Naturalism
Modern Romance. W. Calin
The Theater of the Absurd. Sohlich.
Modern French Novelists. Birn,
The Rhetoric of Nonfiction. Hart, Rendall.
The New Novel in France. Birn, F. Calin.
RL 508. Workshop. Credit hours to be arranged.
RL 509. Practicum. Credit hours to be arranged. Pass or No-Pass grade only.
RL 517, 518, 519. Sixteenth-Century
French Literature. 4 credit hours each
term. A general survey of literature in the
Renaissance, with emphasis on Marguerite de Navarre, Rabelais, Marot, Ronsard. Du Bellay, d'Aubigné, and Montaigne. Rendall.
RL 530. Introduction to Medieval French Literature. 4 credit hours. Initiation to reading texts in Old French. Study of four masterpieces from the perspective of modern criticism. W. Calin.
RL 531, 532. Medieval French Narrative. 4 credit hours each term. Study of three principal medieval narrative genres: epic, romance, allegory of love. Critical analysis of chansons de geste, works by Chrétien de Troyes, and Le Roman de la Rose. Prerequisite: RL 530 . W. Calin.
RL 533, 534. The Waning of the Middle Ages in France. 4 credit hours each term. Study of French narrative fiction, poetry, and theater of the 14th and 15 th centuries. Special attention given to Guillaume de Machaut and François Villon. W. Calin.

## RL 541, 542. French Renaissance and

 Baroque Poetry. 4 credit hours each term. Study of the evolution of lyric genres and of mentalities in the 16th and earth 17 th centuries. Analysis of works by Du Bellay, Ronsard, Sponde, La Ceppède, D'Aubigné, Saint-Amant, La Fontaine, from the perspective of modern criticism. W. Calin.RL 543. French Poetry: 1650-1850. 4 credit hours. A close reading of poetry from the classical and romantic periods. Among the authors to be studied: La Fontaine, Boileau, Voltaire, Chénier, Lamartine, Vigny, Hugo. W. Calin.

RL 546. Molière. 4 credit hours. A critical analysis of selected plays, with emphasis on Molière's comic technique. Rendall.
RL 547. Voltaire. 4 credit hours. Study of Voltaire's satire and historical prose. Desroches.
RL 550, 551. Proust. 4 credit hours each term. Detailed study of $A$ la Recherche dut tempts perdu. Birn.
RL 552. Zola. 4 credit hours. Study of representative works by Zola.
RL 553. Modern French Poetry. 4 credit hours. Study of several major modern poets. F. Calin, W. Calin, Sohlich.

## Courses Offered Only in Poitiers

The following are the courses most frequently taken by students at the Oregon Study Center in France. Since final curricular authority for these courses remains with the University of Poitiers, their exact content
may vary, and they are subject to change without prior notice. A wide range of other courses at various levels is also available at Poitiers.

## RL 324, 325. Intermediate French

 Grammar. 3 credit hours each term. Systematic study of French grammar and syntax. Includes exercises in dictation with subsequent analysis of sentence structure and grammar, as well as the study of theory Offered only through the Oregon Study Center at the University of Poitiers, France.RL 326, 327. Exercises in French Style. 3 credit hours each term. Introduction to close analysis of texts. Teaches techniques of close reading through exercises in summarizing and outlining texts from both literary and journalistic sources. Offered only through the Oregon Study Center at the University of Poitiers, France.
RL 334, 335. Introduction to French Civilization. 3 credit hours each term. Survey of French civilization from Gallo-Roman times to the 20th century, complemented by study of the geography of France. Emphasis on social history and on the history of the arts, particularly the visual arts and architecture. Work devoted to geography emphasizes regional cultures and economics in addition to physical geography. Offered only through the Oregon Study Center at the University of Poitiers, France.

## RL 336, 337. Masterworks of French

 Literature. 3 credit hours. each term. Intensive study of major works of French literature from the 17 th, 18 th, and 19 th centuries. Recently the program has included La Fontaine, Fables; Balzac, Cesar Birotteau, Flaubert, Madame Bovary. Offered only through the Oregon Study Center at the University of Poitiers, France.RL 338, 339. Readings in Modern French Literature. 3 credit hours each term. Readings in the modern French novel. At least ten modern novels are read and discussed each term. Recent authors have included Joseph Kessel, Albert Camus, Jean-Paul Sartre, and Francois Mauriac among others. Offered only through the Oregon Study Center at the University of Poitiers, France.
RL 340. Intensive Conversational French. 3 credit hours. Development of oral French skills through audio-visual techniques and small group discussion sections. Concentration is on colloquial and standard conversational French, accompanied by some composition of dialogues. Offered only through the Oregon Study Center at the University of Poitiers, France.

## RL 341. Orientation for Study in France.

3 credit hours. Introduction to a broad range of subjects pertinent to study in France for an academic year ; cultural adaptation, practical information about the university and the community, orientation to the French educational system and philosophy, and pedagogical methods. Includes several excursions to artistic and historical sites of interest like La Rochelle, the romanesque churches of Poitou, Gallo-Roman ruins, etc. Offered only through the Oregon Study Center at the University of Poitiers, France.
RL 342. Contemporary France via Television. 3 credit hours. Study of contemporary French language and society through the use of televised news and documentary material, supplemented by exercises and classroom discussion. Actual news and documentary broadcasts via videotapes. Offered only through the Oregon Study Center at the University of Poitiers, France.

## Italian

## Undergraduate Courses

RL 70, 71, 72. First-Year Italian. 4 credit hours each term. Introduction to Italian, stressing conversation and readings of modern texts. One section each of RL 71 (winter) and RL 72 (spring) offered students showing exceptional ability in RL 70. Hatzantonis and staff.
RL 73, 74. First-Year Italian. 6 credit hours each term, winter and spring. Covers in two terms the work of RL 70, 71, 72 .
RL 104, 105, 106. Second-Year Italian. 4 credit hours each term. Study of selections from representative authors. Composition, pronunciation, grammar. Giustina.
RL 111, 112, 113. Conversational SecondYear Italian. 4 credit hours each term. Fall: review of grammar. Winter and spring: intensive audio-oral practice in classroom and laboratory, to help students master everyday Italian. Designed for students planning to enroll in or returning from the Oregon State System of Higher Education programs in Italy.
RL 199. Special Studies. 1-3 credit hours.
RL 307, 308, 309. Survey of Italian Literature. 3 credit hours each term. Introduction to major currents from Dante to the present. Close examination of representative texts. Prerequisite : two years of college Italian or equivalent. Offered alternatively with RL 377 , 378, 379. Giustina.
RL 374, 375, 376. Italian Composition and Conversation. 3 credit hours each term. Instruction in Italian grammar and current idiomatic patterns; extensive exercises in oral communication and written composition. Conducted in Italian. Prerequisite : two years of college Italian or equivalent.
RL 377, 378, 379. Introduction to Italian Literature. 3 credit hours each term.
RL 377 : methods of literary study. RL 378 : analysis of poetic texts. RL 379 : critical readings of prose : fiction and nonfiction. Offered alternately with RL 307, 308, 309. Giustina.
RL 387. Readings in Italian. 3 credit hours. Intended for students with advanced knowledge of other Romance Languages or Latin who wish to acquire proficiency in reading literary texts. Students who complete this course may enroll in upper-division and graduate courses in literature. Consent of instructor is required. Hatzantonis.
RL 405. Reading and Conference. Credit hours to be arranged.
RL 408. Workshop. Credit hours to be arranged. Designed for special group activities, such as production of Italian plays. Prerequisite two years of college Italian, or consent of instructor. Giustina.
RL 409. Practicum. Credit hours to be arranged. Pass or No-Pass grade only.

## Upper-Division Courses Carrying Graduate Credit

Note : All listed courses may not be offered every year.
RL 407. Seminar. (G) Credit hours to be arranged.
RL 410. Experimental Course. (G) Credit hours to be arranged.
RL 464, 465, 466. Dante and His Times.
(G) 3 credit hours each term. Historical and literary background of the Divine Comedy; study of the poem and of Dante's minor works; Petrarch and Boccaccio. Hatzantonis.

RL 480, 481, 482. Italian Renaissance
Literature. (G) 3 credit hours each term. Study of tragedy, comedy, epic, lyric, novella. historical and political prose, courtesy books, criticism. Italy's role in European Renaissance. Hatzantonis.
RL 483, 484, 485. Nineteenth-Century Italian Literature. (G) 3 credit hours each term. Study of selected Italian authors of the romantic and post-romantic movements.
Emphasis on works of Foscolo, Manzoni,
Leopardi, Verga, De Sanctis, Carducci, and Pascoli. Prerequisite: RL 307, 308, 309, or consent of instructor. Hatzantonis.
RL 486, 487, 488. Twentieth-Century Italian Literature. (G) 3 credit hours each term. The main trends in poetry, drama, and the novel, starting respectively with D'Annunzio, Pirandello, and Svevo to the present. Prerequisite : RL 307, 308, 309, or consent of instructor. Hatzantonis.

## Graduate Courses

Note : All listed courses may not be offered every year.
RL 505. Reading and Conference. Credit hours to be arranged.
RL 507. Seminar. 4 credit hours. Recent topics: The Italian Lyric ; Dante, Petrarch, and Boccaccio; Petrarch and His Influence; Lorenzo de' Medici's Poetic Circle ; The Literature of the Italian Enlightenment; Italian Romanticism; Verga's Narrative.
RL 508. Workshop. Credit hours to be arranged.
RL 509. Practicum. Credit hours to be arranged. Pass or No-Pass grade only.

## Portuguese

No classes in Portuguese will be offered during the 1978-79 academic year.

## Upper-Division Courses Carrying Graduate Credit

RL 471, 472, 473. Portuguese and Brazilian Literature. (G) 3 credit hours each term. Fall: systematic comparison of Portuguese and Spanish ; practice in speaking and understanding Portuguese ; readings in Brazilian culture and civilization. Winter and Spring: close study of selected fiction, poetry and plays of Portugal and Brazil. May be counted towards the major in Spanish.
RL 474, 475, 476. Brazilian Novel. (G) 3 credit hours each term. An historical and critical study of the Brazilian novel of the 19 th and 20 th centuries. May be counted toward the major in Spanish. Prerequisite : a reading knowledge of Portuguese.
RL 477, 478. Advanced Portuguese Language. (G) 3 credit hours each term, winter and spring. Winter: the Portuguese verb system, language laboratory practice ; spring: advanced grammar review and conversation.

## Provençal

No classes in Provençal will be offered during the 1978-79 academic year.
RL 523, 524, 525. The Troubadors. 4 credit hours each term. Descriptive grammar of Old Provençal. Close study of selected lyrics in an attempt to define the contribution of the troubadors to European poetry. Prerequisite: a reading knowledge of French, Italian or Spanish. Hart.

## Spanish

## Undergraduate Courses

RL 60, 61, 62. First-Year Spanish. 4 credit hours each term. An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. Students whose competence in the language already exceeds the scope of this course will not be admitted. Curland, staff.
RL 63, 64. First-Year Spanish. 6 credit hours each term, winter and spring. Covers in two terms the work of RL 60, 61, 62. For students who wish to begin Spanish in the winter term. Students whose competence in the language already exceeds the scope of this course will not be admitted.
RL 107, 108, 109. Second-Year Spanish. 4 credit hours each term. Intensive oral and written exercises designed to help the student acquire an accurate and fluent use of Spanish. Study of selections from representative authors. Special sections for Honors College students and for the students who wish to concentrate on reading. Students whose competence in the language already exceeds the scope of this course will not be admitted. Powers, staff.

## RL 199. Special Studies. 1-3 credit hours.

RL 311. Introduction to the Reading of Spanish Literature. 3 credit hours. Training of the student to read closely texts in all major genres ; explicating a text ; use of library facilities ; introduction to critical writings. Usually taken before work in other literature courses. Staff.
RL 312. Medieval Spanish Literature. 3 credit hours. Close study of Cantar de Mio Cid, the Libro de buen amor, and La Celestina. Topics to be discussed include : the nature of medieval epic ; medieval comedy and parody; the literary tradition of courtly love. Some attention to Spanish social and intellectual history and the historical development of the Castilian language. Prerequisite: RL 311. Hart, R. Jackson, May.
RL 313. The Golden Age. 3 credit hours. Introduction to lyric poetry, prose, and theater of the Spanish Renaissance and Baroque, selected generally from the works of Garcilaso de la Vega, Fray Luis de León, San Juan de 1a Cruz, Lazarillo de Tormes, Cervantes, Lope de Vega, Calderón, and others. Prerequisite: RL 311. R. Jackson, Powers, staff.
RL 314. Modern Spanish Literature. 3 credit hours. Major themes and forms of 19th- and 20th-century Spanish liter ature. Training in the application of basic critical concepts to selected modern works. Prerequisite : RL 311. Ayora, R. Jackson, Lamadrid, May.
RL 315. Spanish-American Literature. 3 credit hours. Introduction to the basic currents and movements in the Spanish-American novel, poetry, and short story. Readings and discussions will center almost exclusively on the 19th and 20th centuries. Prerequisite : RL 311. Ayora, Lamadrid.
RL 347, 348, 349. Spanish Composition and Conversation. 3 credit hours each term. Fundamentals of pronunciation. Extensive oral and written practice. Conducted in Spanish. Prerequisite: two years of college Spanish. Ayora, Curland, Lamadrid.

## RL 350, 351. Spanish Pronunciation and

Phonetics. 2 credit hours each term.
Scientific study of Spanish sounds, rhythms, and intonation. Supervised practice, with individual use of recording equipment. Normally required of Spanish majors and of candidates for teacher certification. Consent of instructor is required. Offered in alternate years. Curland, Craig.

RL 360. Cervantes. 3 credit hours. The course will center on Don Quijote and will stress its importance in the development of the modern novel. The text may be read either in Spanish or in English translation. Spanish majors must do the reading in Spanish. Prerequisite : RL 311, but this will be waived for those students who wish to do the reading in English. Offered in alternate years. Hart, Jackson, Powers.
RL 403. Thesis. Credit hours to be arranged. RL 405. Reading and Conference. Credit hours to be arranged.
RL 409. Practicum. Credit hours to be arranged. Pass or No-Pass grade only.

## Upper-Division Courses Carrying Graduate Credit

Note: All listed courses may not be offered every year.
RL 407. Seminar. (G) 4 credit hours. Several seminars are offered each term. Recent topics: 19th-Century Novel; Spanish Naturalism; Literature of Concern; 20thCentury Novel ; Latin American fiction ; contemporary poetry; Cortázar; history of the language ; Galdós ; Valle-Inclán; bilingualism.
RL 410. Experimental Course. (G) Credit hours to be arranged.
RL 432, 433, 434. Hispanic Culture and Civilization. (G) 3 credit hours each term. Intellectual, cultural, and historical backgrounds of Hispanic literatures. Fall: the medieval and Golden Age periods; winter: the 18th and 19th centuries; spring : the 20th century. Conducted in Spanish. Curland, Lamadrid.
RL 444, 445, 446. Spanish-American
Literature. (G) 3 credit hours each term.
Study of the principal authors of Spanish America since the beginning of the 16 th century. Selections from the works of Ercilla, Sor Juana, Bello, Heredia, Sarmiento, Darío, Silva, Nervo, González Prada, Mistral, and others. Prerequisite : RL 315. Ayora.
RL 451. Spanish Prose of the Golden Age. (G) 3 credit hours. A critical reading in several prose genres of the 16 th and 17 th centuries : dialogs, libros de caballerias, pastoral and picaresque novels, the novela cjemplar. Prerequisite: RL 313. Powers. RL 452. Renaissance and Baroque Poetry. (G) 3 credit hours. The Petrarchism of Garcilaso and Herrera ; traditional forms, especially the romance; the religious and mystic poetry of Fray Luis de León, San Juan de la Cruz; Santa Teresa; three seventhcentury poets : Góngora, Lope de Vega, and Quevedo. Prerequisite: RL 313. Powers, Hart.
RL 453. Introduction to the Drama of the Golden Age. (G) 3 credit hours. Readings in the works of Cervantes, Lope de Vega, Tirso de Molina, Ruiz de Alarcón, and Calderón de la Barca. Prerequisite : RL 313. Powers.
RL 454. History of the Spanish Language.
(G) 3 credit hours. The place of Spanish among the Romance Languages and the development of the literary language from the Middle Ages to the present, with some attention to the development of a distinctively American form of Spanish. Hart.
RL 455. The Nineteenth-Century Novel.
(G) 3 credit hours. Development of realism in Spanish narrative and its relationship to social and political change of the period. Naturalism in its Spanish form. Galdós, Clarín, Valera, Pardo, Bazán. Prerequisite :

Previous work in Spanish literature. Offered alternate years. R. Jackson.
RL 456. Pre-Civil War Spanish Narrative.
(G) 3 credit hours. Experimental prose narrative from the turn of the century until 1936, with emphasis on the Generation of '98. Prerequisite: Previous work in Spanish literature. Offered alternate years. R. Jackson.
RL 457. Post-Civil War Narrative. (G) 3 credit hours. Study of major novels and short stories and their relationship to social and political conditions of the period. Prerequisite: Previous work in Spanish literature. Offered alternate years. R. Jackson.
RL 458. Modern Spanish Poetry. (G) 3 credit hours. Vanguard movements in poetry, and their relationship to film and art. Emphasis on García Lorca and his generation. Prerequisite: Previous work in Spanish literature. Offered alternate years. R. Jackson, B. May. RL 459. Literature and the Spanish Civil War. (G) 3 credit hours. A survey of literature arising from the Spanish Civil War. Consideration of the themes of artistic commitment and the relationship between propaganda and literature. Writers include : Hemingway, Malraux, Koestler, George Orwell, and others. Reading knowledge of Spanish desirable but not essential. Offered alternate years. R. Jackson.
RL 461, 462, 463. Advanced Spanish Composition and Conversation. (G) 2 or 3 credit hours each term. Normally required of Spanish majors and of candidates for teacher certification. Prerequisite: RL 347, 348, 349 or equivalent. Conducted in Spanish. Ayora, Curland, Jackson, May.

## Graduate Courses

Note: All listed courses may not be offered every year.
RL 503. Thesis. Credit hours to be arranged. A no-grade course.
RL 505. Reading and Conference. Credit hours to be arranged.
RL 507. Seminar. Credit hours to be arranged. Recent topics have been:
History of the Spanish Language. Hart.
La Celestina. Hart, Jackson.
The Renaissance Lyric in Spain and Portugal. Hart.
Cervantes. Powers
Lope de Vega. Powers.
The Nineteenth-Century Spanish Novel. Jackson.
Spanish Vanguard Movements. Jackson.
Jorge Luis Borges: Poetry, Short Story, and Essay. Ayora.
The Spanish-American Short Story. Ayora.
Poetry of the Generation of 1927. May.
RL 508. Workshop. Credit hours to be arranged.
RL 509. Practicum. Credit hours to be arranged. Pass or No-Pass grade only.
RL 535, 536, 537. The Literature of Medieval Spain. 4 credit hours each term. Introduction to reading texts in Old Spanish. Close study of Poema de Mio Cid, Libro de buen anor, and La Celestina, with attention to recent developments in criticism. Hart.
RL 554, 555, 556. Drama of the Golden Age. 4 credit hours each term. Interpretation and criticism of selected comedias of Lope de Vega, Calderón, Tirso de Molina, Ruiz de Alarcón, Augustín Moreto, and Rojas Zorilla. Conducted in Spanish. Powers.
RL 557, 558, 559. The Modernista Movement. 4 credit hours each term. Interpreta-
tion and criticism of the work of leading
Spanish American "modernista" writers Martí, Silva, Julián del Casal, Gutiérrez, Nájera, Dario, Lugones, and others.
RL 561, 562, 563. Spanish-American Novel. 4 credit hours each term. Study of the novel as a literary form in Spanish America.


## Sociology

Faculty
Donald R. Van Houten, Ph.D., Department Head. Associate Professor of Sociology (complex organizations, sociology of work). B.A., Oberlin, 1958 ; Ph.D., Pittsburgh, 1967. Joan R. Acker, Pli.D., Associate Professor of Sociology (sociology of women, stratification, sociology of social welfare, organizations, and occupations). B.A., Hunter, 1946 ; M.A., Chicago, 1948 : Ph.D., Oregon, 1967.
Vallon L. Burris, Ph.D., Assistant Professor of Sociology (sociological theory, political economy, sociology of education). B.A., Rice, 1969 ; Ph.D., Princeton, 1976.
Lazerence R. Carter, Ph.D., Assistant Professor of Sociology (demography, human ecology, urban sociology, economic sociology). B.S., Howard, 1958 ; M.A., 1970, Ph.D., 1973, Oregon.

Steven Deutsch, Ph.D., Professor of Sociology (economic, political, comparative sociology). B.A., Oberlin, 1958 ; M.A., 1959, Ph.D., 1964, Michigan State. (On leave 1978-79.)
Richard P. Gale, Ph.D., Associate Professor of Sociology (environmental sociology, sociology of natural resources, sociology of developing areas). B.A., Reed, 1960 ; M.A., Washington State, 1962 ; Ph.D., Michigan State, 1968.
Marion Sherman Goldman, Ph.D., Assistant Professor of Sociology (sociology of law, sociology of deviance, sociology of women ). A.B., California, Berkeley, 1967 ; M.A., 1970, Ph.D., 1977, Chicago.
Paul Goldman, Ph.D., Assistant Professor of Sociology (bureaucratic organizations, sociology of work and occupations, social stratification, social organization, sociology of education). B.A., Stanford, 1966; M.A., Chicago, 1970; Ph.D., Chicago, 1974.
Daniel N. Gordon, Ph.D., Associate Professor of Sociology (criminal justice, social deviance and control, law and social science). B.A., Johns Hopkins, 1961 ; M.S., 1964, Ph.D., 1967, Wisconsin ; J.D., Oregon, 1978. Richard J. Hill, Ph.D., Professor of Sociology (methodology, social psychology, formal theory) and Dean, Wallace School of Community Service and Public Affairs. A.B., 1950, M.A., 1951, Stanford; Ph.D., Washington, 1955.

Theodore B. Johannis, Jr., Ph.D., Professor of Sociology and Family Studies (sociology of time and leisure, socialization, marriage and the family). B.A.,

1948, M.A., 1948, Washington State ; Ph.D., Florida State, 1955.
Benton Johnson, Plı.D., Professor of Sociology (sociology of religion, sociological theory). B.A., North Carolina, 1947 ; M.A., 1953, Plı.D., 1954, Harvard.
Miriam M. Johnson, Ph.D., Assistant Professor of Sociology (sex roles, the family, socialization). B.A., North Carolina, 1948 ; M.A., 1953, Plı.D., 1955, Harvard.
Walter T. Martin. Plı.D., Professor of Sociology (population deviance, ecology, urban sociology). B.A., 1943, M.A., 1947, Ph.D., 1949, Washington. (On sabbatical leave fall 1978.)
Kenneth Polk, Ph.D., Professor of Sociology (delinquency and criminology, methodology). B.A., San Diego State, 1956; M.A., Northwestern, 1957 ; Pl.D., California, Los Angeles, 1961.

Jean Stockard, Ph.D., Assistant Professor of Sociology (sociology of education, socialization and sex roles, methodology and statistics). B.A., 1969, M.A., 1972, Pl.D., 1974, Oregon.
Albert J. Szymanski, Ph.D., Associate Professor of Sociology (stratification, social movements, sociological theory, political sociology). B.A., Rhode Island, 1964 ; Ph.D., Columbia, 1971. (On sabbatical leave 1978-79.)
David T. Wellman, Ph.D., Associate Professor of Sociology (race and ethnic relations, sociological theory, critical Marxism, field methods, sociology of working class life). B.A., Wayne State, 1962 ; M.A., 1966, Ph.D., 1974, California, Berkeley.

## Faculty Emeriti

Joel V. Berreman, Ph.D., Professor Emeritus of Sociology (social psychology, race relations) B.A., 1927, Willamette ; M.A., 1933, Oregon ; Ph.D., 1940, Stanford; at Oregon since 1946.

## Undergraduate Studies

Sociology is the analytical study of the development, structure, and function of human groups and societies. It is concerned with the scientific understanding of human behavior as it relates to, and is a consequence of, interaction within groups.

The undergraduate program in sociology is designed : (1) to provide a basis for understanding the rapidly changing modern world; (2) to provide a useful background for students
preparing to enter directly into beginning positions in social work, personnel work, recreation, and social-studies teaching; (3) to prepare students for graduate work leading to professional careers in sociology and closely related fields. Students who are interested in professional social work should consider majoring in the School of Community Service and Public Affairs.

The lower division 200-level courses are designed to provide an introduction to the field. The basic course is the one-term Introduction to Sociology (Soc 201). Students typically take Soc 201 and at least two additional courses from the Soc 206, 210-217 group before moving on to upper-division courses. Courses in the Soc 206, 210-217 group provide an introduction to some of the areas of specialization within the field, such as race and ethnic relations (Soc 212, Race, Class, and Ethnic Groups in America) and political sociology (Soc 215 , Social Issues and Social Movenents).

The 300-level (upper-division) courses are designed to extend the student's knowledge of subjects covered in the 200-level courses and provide an introduction to social research methocls and social theory.

The 400-level (upper-division) courses are the advanced and specialized courses in the department. Most build on background obtained in the 200-level and 300-level courses. Students interested in the sociology of the community for example, may take Communities, Population, and Resources (Soc 210), The Community (Soc 304), Urbanization and the City (Soc 442) and The Urban Community (Soc 443). Students interested in criminology, juvenile delinquency, and the field of corrections, for example, may take Social Deviancy and Social Control (Soc 211), and Criminology and Delinquency (Soc 440 and 441 ). It is recommended that students have at least 9 credit hours in sociology courses before taking 400-level courses.
Requirements for Baccalaureate Degree. Candidates for the baccalaureate degree with a major in sociology must satisfy all general requirements of the University and the College of Arts and Sciences. Majors in sociology are required to complete a minimum of 42 credit hours of undergradurate sociology courses. Of the 42 credit hours, at least 30 must be in upper-division courses, excluding Soc 400 search courses and Soc 409, and not more than nine of those 30 may be numbered Soc 401 , Soc 405, or Soc 406. Seminars (Soc 407) may be counted toward the
upper-division credit hours requirement for the major.
As of Spring term 1978, sociology majors are required to take Introduction to Social Research (Soc 327) and Development of Sociology (Soc 370).
These two courses are not required of (but highly recommended to) students who were declared sociology majors prior to Spring 1978.

The department has no restriction on the number of courses in the major that may be taken on a pass-undifferentiated basis. Of the courses which are taken on a graded basis, sociology majors are required to have at least a 2.0 grade point average in order to obtain a baccalaureate degree.

Sociology majors are urged to establish and maintain communication with their academic advisers. Although majors may select advisers from the entire sociology faculty, a student may want to choose as adviser the faculty member who shares interests with the student, or has indicated a preference for working with undergraduates with particular career goals or backgrounds.

Each student should plan a course program which will emphasize those experiences most useful for the student's educational and career objectives. The individual model progrann reflects the formal courses, reading and conference courses, seminars, and research experiences through which the student builds a solid base as an undergraduate sociology major. By leaving the entire matter of course selection to the student, the department is placing the responsibility on each student to carefully plan an undergraduate program which will be most useful to the student. It is recognized that different educational and career goals involve different course programs. Also, it is recognized that a sound undergraduate program in sociology should involve awareness of related courses in other departments of the University. Undergraduate majors need to realize that the courses selected may affect their career opportunities. Students seeking specialized undergraduate training will want to supplement formal course work with reading or research.

With the help of a faculty adviser, the student should set out a model program. The program is not intended to be a series of mandatory courses, but should include courses and other experiences (reading, research, field experience) relevant for the student's objectives. Several suggested model programs are listed below. It is essential, however, that students consult with their faculty advisers concerning the selection of specific courses.

Proyram for General Sociology Majors. For students who want a broad liberal education, the sociology department offers a wide variety of courses covering a full range of human social life, while at the same time providing theoretical and methodological perspectives which help to integrate their studies.

General majors should begin with Soc 201 and a number of other 200level courses in their freshman and sophomore years. These lower-division courses provide an introduction to the discipline, with an emphasis on how sociology can be applied to contemporary social issues.

In their upper-division years, general majors may choose from courses which provide more depth in the study of each of the institutional areas in modern society, such as: the family, education, economic life, politics, criminology, social welfare, war and peace, and leisure. Courses such as social stratification, social psychology, and social change help to tie these diverse areas together by providing perspectives which are useful in the study of any institutional area. Finally, courses in sociological theory and methodology provide more general analytical and research skills which will be useful both in sociology courses and in whatever activities the student may pursue after graduation.
Program for Majors Interested in the Social Service Professions. The "social service professions" are those which help people-social work, counseling, community relations, housing, labor relations and personnel, and counseling in different institutional settings. Students interested in these occupations should consider najoring in the School of Community Service and Public Affairs, rather than in sociology. However, many students may wish to retain a major in sociology, supplementing their program with course work in the School of Community Service and Public Affairs, and in the Departments of Psychology, and Political Science, and the College of Education.

Many of these occupations require graduate training or field training. Students should consult the Counseling Center for more detailed information.

Students majoring in sociology who want to enter one of the helping professions should take at least one course in sociological methodology, at least two courses in social psychology, and several courses which deal with specific problem areas in society (race, crime, the cities, population).
Program for Majors Interested in Business or Government Service.

Many sociology majors find employment with business or goverumental organizations. These organizations typically seek general human-relations skills, some awareness of organizations and the surrounding social environment, and an ability to analyze and understand basic social data.
Students interested in possible enployment with business organizations should, of course, consider a major in the College of Business Administration. Sociology majors interested in business organizations should include courses in the College of Business Administration (e.g., accounting, personnel management) and in the economics department.
Students with career goals in governmental service may want to consider a major in the School of Community Service and Public Affairs. Sociology majors should include courses in public administration and political science.

## Secondary School Teaching. The

 Department of Sociology offers work to prepare persons to teach the social studies in Oregon public secondary schools. Certification as a secondary teacher with the social studies endorsement requires satisfactory completion of a program of teacher preparation which includes subject matter preparation in the social sciences, and in professional education plus recommendation of the institution in which the preparation is completed. The Department offers work toward initial or Basic certification and toward Standard certification. The University's program to prepare social studies teachers is subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission, effective January 1, 1980. For specific information regarding department requirements for the social studies endorsement, students should consult the departmental norm adviser for teacher education, and the Office of Secondary Education in the College of Education.Program for Majors Interested in Graduate Training in Sociology. Many students who continue in the field of sociology eventually enter a program leading to the Ph.D., in sociology. Students planning to pursue graduate work in sociology should have a strong background in sociological theory and social research methods. Students also should begin to think about the special areas within sociology which are of greatest interest, and about those graduate schools which offer specialized training in these areas. Application to
graduate school should be made in the fall or winter of the year before the student wishes to enter a graduate program. Some graduate schools emphasize a broad social science background. Many will require either undergraduate work in mathematics or statistics for admission, or ask that new graduate students take remedial, noncredit courses if admitted to the program. Some universities still require competence in a foreign language for the Master's or Ph.D. degrees, and will prefer to admit students with some undergraduate language training. Others look with disfavor on undergraduate programs with a large number of nongraded courses, particularly in the major. Occasionally, schools will encourage students to submit samples of their undergraduate work as part of the materials for admission to the graduate program. Nearly all graduate schools will require several letters of reference from faculty members, and some evidence of successful performance in course work. Many also will require applicants to take the Graduate Record Examination. Students considering graduate school should talk to their faculty advisers about the programs of the different schools, what experiences will increase the chances of admission, and what will be asked of students in a graduate program in sociology.

## Graduate Studies

The graduate program of the Department of Sociology is primarily intended for studies leading to the Doctor of Philosophy degree.

Students seeking an advanced degree in sociology should have achieved a grade-point average of 3.00 or better in their undergraduate work in the social sciences. Entry is not restricted to those with undergraduate majors in sociology, although students without any undergraduate work in sociology have a considerably reduced chance of admission.

Students admitted to the graduate program with a baccalaureate degree are required to complete 54 credit hours of graduate-level work, all of which wil be graded except work taken under the numbers Soc 501 , Soc 505 , or Soc 506. Such students normally complete the 54-hour requirement in their first six terms of enrollment, and those maintaining a grade-point average of 3.00 or better are awarded a Master's degree upon completion of this requirement.
Prior to being admitted to the doctoral program, students must pass
the Departmental Qualifying Examination in Theory and Methods. After passing this examination, the student defines two or three fields of specialization and prepares for Comprehensive Examinations in these areas. Upon passing the Comprehensive Examinations, the student is advanced to Ph.D. candidacy and begins work on the doctoral dissertation. The doctoral dissertation must embody the results of research and show evidence of originality and ability in independent investigation. Early in their graduate work, students are encouraged to begin defining the general topic to be covered in the dissertation research.

Many students receive some type of financial assistance. In addition, some graduate students hold part-time teaching or research appointments outside of the department.

A booklet describing the graduate program may be obtained from the department. The booklet details the entire graduate program, specifies the materials needed to apply for admission to the program, and includes a listing of current staff members and their research interests. Students applying for graduate admission should subnit all necessary materials by February 1, if possible, and by March 1 at the latest.

## Undergraduate Courses

Soc 199. Special Studies. 1-3 credit hours.
Soc 200. SEARCH. 1-3 credit hours.
Soc 201. Introduction to Sociology. 3 credit hours. Introduction to the sociological perspective, with emphasis on fundamental concepts, theories, and methods of research.

## Soc 206. Introduction to Social Psychology.

 3 credit hours. An introduction to the field and topics of social psychology. Emphasis. on processes of interaction, the social origin of psychological processes, group membership and reference processes, analysis of everyday social phenomena, the structure and process of role relations, and selected research topics in the area. Prerequisite : Soc 201 or equivalent.Soc 210. Communities, Population, and Resources. 3 credit hours. Analysis of the interrelationship of population and resources in the structuring of human communities; examination of processes of community change which occur in response to major social problems, population redistribution, and resource alteration; alternatives of the traditional community. Prerequisite : Soc 201.
Soc 211. Social Deviancy and Social Control. 3 credit hours. Examination of concepts of deviance, theories explaining deviant behavior, and mechanisms for the social control of deviance. Prerequisite : Soc 201.
Soc 212. Race, Class, and Ethnic Groups in America. 3 credit hours. Analysis of the distinctions between European ethnic groups and people of color, focusing on the emergence of internal colonies in American society. Prerequisite: Soc 201.

Soc 213. Organizations and Occupations.
3 credit hours. An examination of the nature and consequences of bureaucracies and bureaucratization in modern society, work and careers, technology and alienation. Prerequisite : Soc 201.
Soc 215. Social Issues and Social Movemont. 3 credit hours. Contemporary social issues viewed from a sociological perspective. Poverty, racism, militarism, and other issues are related to the social structure of American society. Social movements and ideologies related to these issues are examined. Prerequisite : Soc 201.

## Soc 216. Introduction to the Sociology of

Women. 3 credit hours. Survey of major aspects of the position of women in contemporary society including examination of theoretical approaches to the study of women ; relationship of the position of women to the family structure and the economic system; the special position of minority women; and the development of the feminist movement. Prerequisite: Soc 201.
Soc 217. Special Topics in Sociology. 3 credit hours. A selection of topics applying the concepts and skills developed in Sociology 201 and 210-216 to current major sociological issues and problems. Emphasis on using theoretical formulations and research to better understand the roots, development, and varieties of present social concerns. Prerequisites : 201 and one of the following depending upon the particular topic : $206,210-216$. May be repeated for credit when topic changes.
Soc 301. American Society. 3 credit hours. A critical analysis of conflicting interpretations of selected aspects of American culture and institutions and the ways in which they are changing. Not offered annually. Prerequisite : Soc 201.

## Soc 303. World Population and Social

 Structure. 3 credit hours. Introduction to population studies, providing within a sociological framework an analysis of historical, contemporary, and anticipated population conditions and trends, as they are related to social situations and to the organization of society. Prerequisite: Soc 201.Soc 304. The Community. 3 credit hours. Analysis of the structure and organization of human communities. Prerequisite : Soc 201.
Soc 314. Socialization and Society. 3 credit hours. Analysis of the nature and processes of socialization at different stages of the life cycle, the effects of socialization of the individual, and the effects of societal and cultural influences on socialization processes. Prerequisite: Soc 201.
Soc 326. Quantitative Methods in Sociology. 3 credit hours. Construction and interpretation of tables and graphs, descriptive statistics, measures of association and contingency relationships, basic ideas of probability, and elementary statistical inference applied to nonexperimental research. Not intended for students who need a standard introductory statistics course with emphasis on probability and statistical inference or who plan to take more than one term of statistics. Consent of instructor required.
Soc 327. Introduction to Social Research. 3 credit hours. The development of social research ; the nature of scientific inquiry and basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Prerequisite : 9 credit hours in sociology, or consent of instructor.
Soc 349. Social Change. 3 credit hours.
Analysis of the processes, characteristics, and conditions of change in large social systems; systematic examination of various theoretical
perspectives. Not offered annually. Prerequisite : 9 credit hours in sociology. Offered 1978-79.
Soc 370. Development of Sociology. 3 credit hours. Starting with Plato, the major writers and ideas that have shaped contemporary sociology are analyzed, with focus on recurrent concepts and issues that continue to challenge sociological inquiry. Special attention to the ways in which social structure affects social thought and vice versa. Prerequisite: 9 credit hours in sociology, or consent of instructor.
Soc 371, 372. Contemporary Sociological Perspectives. 3 credit hours each term. Introduction to the major sociological theories and perspectives in current use, including an examination of the critical issues being debated. Possible topics include functionalism, conflict theory, symbolic interactionism, ethnomethodology, social phenomenology, and critical theory. Prerequisite : 9 credit hours in sociology, or consent of instructor.

## Soc 375. Marxist Sociological Theory.

 3 credit hours. A systematic overview of basic Marxist concepts, fundamental theory, and social analysis from the works of Marx and Engels. The topics include dialectical and historical materialism, class, historical development, political economy, imperialism, the national question, the state, the Marxist theory of sexism, revolution, and socialism. The course is designed as an introduction to Marxist social theory and as such assumes no prior knowledge of either Marxism or sociology beyond 201. Prerequisite: Soc 201.Soc 400. SEARCH. 3 credit hours.
Soc 401. Research. Credit hours to be arranged.
Soc 403. Thesis for Honors Candidates. Credit hours to be arranged.
Soc 405. Reading and Conference. Credit hours to be arranged.
Soc 406. Supervised Field Study. Credit hours to be arranged.
Soc 407. Seminar. Credit hours to be arranged.
Soc 409. Supervised Tutoring Practicum. $1-3$ credit hours any term. A no-grade course.

## Upper-Division Courses <br> Carrying Graduate Credit

Soc 407. Seminar. (G) Credit hours to be arranged.
Problems in Leisure Research.
Political Economy.
Sociology of Law.
Criminal Justice.
Juvenile Delinquency.
Role Theory and Research.
Problems in Family Research.
Socialist Experiments.
Environmental Movements.
Soc 411, 412, 413. Sociological Research Methods. (G) 3 credit hours each term. Basic methodological problems such as the nature of science, the problem of meaning, formal and empirical systems, the use of models, causal inference under experimental and nonexperimental conditions, field techniques of data collection, and methods of analysis including parametric and nonparametric techniques of bivariate and multivariate analysis. Prerequisite : Soc 326,327 ; the work of each term is prerequisite to that of the following term.
Soc 415. Social Demography. (G) 3 credit
hours. Methodological problems and tech-
niques in demographic and ecological analysis. Prerequisite: Soc 303 or equivalent.
Soc 416. Sociology of the Environment.
(G) 3 credit hours. A sociological approach to the study of society and its relationship with the natural environment. Application of basic sociological concepts to a variety of natural environment topics (natural resources, pollution, energy, population growth, resource utilization). Topics include the environmental movement, interorganizational cooperation and conflict, value and attitude change, and the uses of sociology in dealing with environmental problems. Prerequisite : 9 credit hours in sociology, or consent of instructor.
Soc 423. The Family. (g) 3 credit hours. The family in historical perspective. An introduction to the study of the family as a social institution and small group association. Prerequisite : 9 credit hours in sociology.
Soc 428. Social Psychology. (G) 3 credit hours. Systematic consideration of theoretical formulations of the field of social psychology, with emphasis upon sociological perspectives. Symbolic interactionist theoretical positions, social exchange theories, communication, language, and sociology of knowledge in relation to cognitive social psychology. Analysis of major research problems from various theoretical positions. Prerequisite: Soc 206 or Psy 216, 9 credit hours in sociology, or consent of instructor.
Soc 429. Social Self and Identity. (G) 3 credit hours. Consideration of the various theories of self and identity in social psychology, from William James, Cooley, and Mead to contemporary sociological treatments, such as Goffman, Strauss, and McCall and Simmons. Prerequisite: Introductory social psychology and advanced standing.
Soc 430. Theory of Small Groups. (G) 3 credit hours. Group goals, decision-making, roles, status, power, and cohesion. Emphasis on understanding and improving ongoing groups. Not offered annually. Prerequisite : 9 credit hours in social science.
Soc 438. Social Psychology of the Family. (G) 3 credit hours. The dynamics of family interaction throughout the family life cycle. Prerequisite: Soc 423, or equivalent.
Soc 439. Theories of Deviance. (G) 3 credit hours. Major sociological theories about the structural causes and effects of deviance, along with empirical studies testing those theories. Prerequisite : Soc 211.
Soc 440, 441. Criminology and Delinquency.
(G) 3 credit hours each term. The nature and extent of delinquency and crime as forms of deviant social behavior; contributing factors; current prevention and treatment programs. Prerequisite : Soc 201.

## Soc 442. Urbanization and the City. (G)

3 credit hours. Determinants and consequences of urbanization under different conditions ; the city as a social and ecological system. Prerequisite: 9 credit hours in sociology.
Soc 443. The Urban Community. (G) 3 credit hours. The city as a social system, as a place of residence, work and play; problems of integration and social order ; organization to modify the nature of the contemporary city and to plan for its future. Prerequisite : Soc 442 is strongly recommended.
Soc 444. Sqciology of Migration. (G) 3
credit hours. Study of the dynamics of migration as related to the dynamics of social change. Prerequisite : 9 credit hours in sociology.
Soc 445. Sociology of Race Relations. (G)
3 credit hours. Analysis of racial oppression
as a structural and ideological feature in American life. Prerequisite : introductory course in sociology, anthropology, or psychology.
Soc 446. Sociology of Work. (G) 3 credit hours. An examination of work life and change in experience of work; with particular emphasis on understanding the effect of work on other aspects of life and experience such as technology, economy, social control, and culture. Prerequisite: 9 credit hours in sociology.
Soc 447. Industrial Sociology. (G) 3 credit hours. The study of the process of transformation in the post-Industrial Revolution period, the shaping of the labor force, labor history, analysis of labor union structure and organization, and current directions in the labor force: changes in technology, sexual, and racial divisions in the occupational structure, and related shifts. Prerequisite: 9 credit hours in sociology.
Soc 448. Sociology of Occupations. (G) 3 credit hours. The nature, functions, and significance of occupational groupings in modern society ; the relationships of occupation to other aspects of life; the significance of work for the various forms of social organization ; the impact of change on individual occupations and occupational categories. Not offered annually. Prerequisite : 9 credit hours in sociology.
Soc 449. Women and Work. (G) 3 credit hours. Historical development and present status of women's participation in the labor market, sex segregation of occupation, bureaucratic structure and sex stratification, housework as occupation, the relationship between paid and unpaid labor. Major theoretical perspectives explaining sex inequality in the labor force. Social-psychological factors in the work experience of women. Prerequisite : Soc 216.
Soc 450. Sociology of Developing Areas. (G) 3 credit hours. An analysis of social and economic structures and processes promoting and inhibiting change in underdeveloped areas. Special attention given to topics such as urbanization, industrialization, cultural change, and world poverty and dependence. Not offered annually. Prerequisite : 9 credit hours in sociology.
Soc 451. Social Stratification. (G) 3 credit hours. Analysis of class in American society. The blue-collar working class, upper class, white-collar class, and independent middle class examined in their relationships to each other and to American society as a whole. Some treatment is given to the development of the U.S. class system and to the relations. between class and race and class and sex in contemporary America. Prerequisite : 9 credit hours in sociology.
Soc 452. Social Stratification. (G) 3 credit hours. Theories of stratification and class in comparative and historical perspective; functionalist, militarist, elitist, political, and Marxist theories of stratification are examined. The development of class systems from the origins of civilization to early capitalism are treated; class systems in the Third World and their relationship to those in the developed countries are also studied. Prerequisite: 9 credit hours in sociology.
Soc 455. Sociology of Women. (G) 3 credit hours. A sociological analysis of sex differentiation and sex stratification with major focus on industrial society. Intensive examination of relationships between ideologies concerning women, changes in socioeconomic organization, socialization and sexuality. Prerequisite: Soc 216.

Soc 456. Sex and Identity: Theoretical Perspectives. (G) 3 credit hours. Theories relating to the origin and perpetuation of sex differences and sex inequality. Synthesizing findings from biology, psychology, sociologv. and anthropology from a feminist perspective. Relationship of family structure to sex-role developnent. Prerequisites : social-science background and one course in Women's Studies.
Soc 461. Sociology of Religion. (G) 3 credit hours. Sociological analysis of religious belief and behavior; special attention to the relation between religious institutions and the larger societies of which they are a part. Prerequisite : 9 credit hours in sociology, or consent of instructor.
Soc 462. Sociology of the Family. (G) 3 credit hours. The family as a social institution and its relationship to other social institutions. Prerequisite: Soc 423, or equivalent.
Soc 464. Systems of War and Peace. (G) 3 credit hours. Violence and nonviolence as functions of social structures and as instruments of social change. Systems of international threat, their supporting institutions, and the ideology of nationalism. Not offered annually. Prerequisite : 9 credit hours in sociology.
Soc 465. Political Sociology. (G) 3 credit hours. Sociological theories and concepts brought to bear on the analysis of various aspects of political theory and behavior ; social bases of power and policy determination ; institutional interrelationships ; intellectuals and ideologies; political trends and change ; political participation and membership. Prerequisite : 9 credit hours in sociology
Soc 466. Sociology of Knowledge. (G) 3 credit hours. Analysis of the relationships between society and thought. Types of knowledge considered in terms of the social settings in which they were produced and received. Not offered annually. Prerequisite : 9 credit hours in sociology.
Soc 467. Sociology of Social Welfare. (G) 3 credit hours. Analysis of the structure of social welfare, the interrelationships between social welfare programs and other sectors of the socio-economic system, the development of the welfare state in industrial capitalist society, and the problems of clients and professionals. Prerequisite : 9 credit hours in sociology.
Soc 470. Bureaucracy, Power, and Society.
(G) 3 credit hours. Critical examination and evaluation of theory and research on bureaucratic structures and processes; distribution and exercise of power in organizations, the linkages between organizations and larger societal structures and processes, especially national and international power structures. Prerequisite : 9 credit hours in Sociology, or consent of instructor.
Soc 472. Changing Organizations. (G) 3 credit hours. An examination and evaluation of theoretical and empirical work on organizational change with particular attention given to strategies of elite and non-elite change agents. Not offered annually. Prerequisite: 9 credit hours in Sociology, or consent of instructor.
Soc 490. Sociology of Leisure. (G) 3 credit hours. Sociological analysis of nonwork time and leisure behavior ; the relationship between patterns of use of nonwork time and leisure and other social institutions. Prerequisite : 9 credit hours in sociology.
Soc 491. Sociology of Education. (G) 3 credit hours. The relationship between education and other social institutions; the school and the community ; the school as a social system ; social change and education. Prerequisite : 9 credit hours in sociology.

## Graduate Courses

Soc 501. Research. Credit hours to be arranged. A no-grade course.
Soc 502. Supervised College Teaching.
Credit hours to be arranged. A no-grade course.
Soc 503. Thesis. Credit hours to be arranged A no-grade course.
Soc 505. Reading and Conference. Credit hours to be arranged.
Soc 506. Supervised Field Study. Credit hours to be arranged.
Soc 507. Seminar. Credit hours to be arranged.
Evaluation Research.
Theoretical Issues in the Sociology of Women.
Economic Sociology.
Theories of Organizations.
Values and Social Structure
Critical Theory.
Soc 508. Workshop. Credit hours to be arranged. Topics to be announced. Offered only in Summer Session.
Soc 509. Supervised Tutoring Practicum.
$1-3$ credit hours any term. A no-grade course.
Soc 510, 511. Logic and Scope of Socio-
logical Inquiry. 3 credit hours. Fundamental philosophical and methodological issues which underlie sociological theory and research.
Topics include the issue of values in social research, inductivism vs. deductivism, the goals and uses of sociology, and the philosophical underpinnings of common research strategies in sociology. Open only to sociology graduate students.
Soc 520. Durkheim, Weber, and the Modern Functionalists. 3 credit hours. A critical exposition of the theoretical works of Emile Durkheim, Max Weber, and the school of modern sociological functionalism, with special attention to the works of Talcott Parsons.
Soc 530. Marxist Theory. 3 credit hours. Reviews the basic Marxist social theory and examines major contemporary debates with the Marxist paradigm of social science. Topics include the Marx-Freud synthesis (Reich, Fromm, Marcuse), monopoly capitalism, contemporary theories of imperialism, Leninism (Lenin, Gramsci, Lukacs, Trotsky, Stalin, Mao Tse-tung), Critical Theory, and Hegelian Marxism.
Soc 540. Issues in Sociological Theory. 3 credit hours. A survey of major sociological theories, perspectives, and issues that are not covered in detail in Soc 520 or Soc 530 . Topics include the sociology of knowledge, phenomenological sociology, and contemporary critical theory.
Soc 550. Issues in Social Psychological Theory. 3 credit hours. A survey of the major theoretical issues and formulation of research problems in social psychology. Instructor's consent required.
Soc 560. Experimental Methods and Design. 3 credit hours. The examination of the logic and design of experimentation in non-laboratory social settings. Field approximations to experimental research ; quasiexperimental designs. Factors effecting the validity of field experiments. The evaluation of social programs. Not offered annually. Prerequisites: graduate standing, Soc 412 or the equivalent, or consent of instructor.
Soc 565. Survey Methods and Design. 3 credit hours. An examination of the design of surveys of human populations. Problem formulation, instrument development, and sampling designs. Strategies applicable to the analysis and interpretation of survey data.

Prerequisites: graduate standing, Soc 412 or the equivalent, or consent of instructor.

## Soc 570. Field Methods and Design. 3

 credit hours. Methods for observing events in a natural setting; describing cultures on their own terms; the discovery of characteristic ways in which people categorize, code, and define their own experience.Soc 575. Demographic Methods. 3 credit hours. Use of demographic techniques as tools, and censuses as data sources for a variety of disciplinary and quantitative approaches to research in social plienomena. Purposes are to understand the nature of a census; the many uses of a census; the limitations of census data; conventional and less conventional methodological techniques in the use of census data; the uniquely spatial and temporal dimensions of census data as it is employed in sociological research ; the problems encountered in aggregating and disaggregating data in macro-sociological research ; and to employ demographic methods and census in conducting research.
Soc 580. Historical and Comparative Methods in Sociology. 3 credit hours. An examination of historical and comparative methods in sociological research. Theory construction, hypothesis testing, and the use of quạntitative and qualitative historical sources.

## Speech

## Faculty

Ronald E. Sherriffs, Ph.D., Department Head, Associate Professor of Telecommunication ( production, criticism). B.A., 1955, M.A., 1957, San Jose State ; Ph.D., Southern California, 1964.
Marya Bednerik, Ph.D., Associate Professor of 'Theater, Director, Theater Area, and Director, University Theater and Carnival Theater. B.A., 1957,
Bennington College; M.A., 1962, Bowling Green ; Plı.D., 1968, Iowa. William Cadbury, Ph.D., Professor of Film Studies (film theory and criticism). Director, Film Studies Area. B.A., Harvard, 1956 ; M.S., 1957, Ph.D., 1961, Wisconsin.
Carl W. Carmichael, Ph.D., Associate Professor of Rhetoric and Communication (communication theory). Associate Director, Communication Research
Center. B.A., Westminster, 1961 ; M.A., Louisiana State, 1962 ; Ph.D., Iowa, 1965. (On sabbatical leave fall, winter 1979.)

Jean V. Cutler. Ph.D., Professor of Film Studies (film history and filmmaking). B.A., Lynchburg, 1955 ; M.A., 1959, Ph.D., 1962, Illinois.

Thomas J. Dahle, Ph.D., Assistant to Provost for Continuing Education with rank of Professor ; Adjunct Professor of Education and Speech. B.S., 1938, M.S., 1949, Wisconsin ; Ph.D., Purdue, 1954.

Faber B. DeChaine, Ph.D., Professor of Theater. B.S., Oregon, 1952; M.A., Michigan State, 1953 ; Ph.D., Minnesota, 1963. (On sabbatical leave 1978-79.)
William R. Elliott, Ph.D., Assistant Professor in Telecommunication (communication theory, research methods). Director, Telecommunication, Director, Communication Research Center. B.S., Oregon, 1964 ; Ph.D., Wisconsin, 1972.
Loreell A. Fiet, Ph.D., Assistant Professor of Theater. B.A., Wisconsin State, 1970 ; M.A., 1971, Ph.D., 1973, Wisconsin.
Robert P. Friedman, Ph.D., Professor of Rhetoric and Communication (history and criticisn of public address, ethics and freedom of speech). B.A., North Carolina, 1948 ; M.A., 1950, Ph.D., 1954, Missouri.
Peter A. Glaser, Ph.D., Assistant Professor of Rhetoric and Communication (speech education fundamentals). B.S., 1967, Kansas State Teachers College ; M.A., 1971, Ph.D., 1975, Pennsylvania State.

Susan R. Glaser, Ph.D., Assistant Professor of Rhetoric and Communication (speech education, interpersonal communication). B.S., 1970, M.A., 1974, Ph.D., 1976, Pennsylvania State. Elz'ood A. Kretsinger, Ph.D., Professor of Telecommunication (research instrumentation). B.S., Southeastern State, Oklahoma, 1939; M.A., Oklahoma, 1941 ; Ph.D., Southern California, 1951.
Dominic A. LaRusso, Ph.D., Professor of Rhetoric and Communication (rhetorical theory, nonverbal communication). B.A., 1950, M.A., 1952,
Washington; Ph.D., Northwestern, 1956. (On leave fall term 1978.)

Charley A. Leistner, Ph.D., Professor of Rhetoric and Communication (history and criticism of public address, protest rhetoric, small group communication). Director, Rhetoric and Communication Area, B.A., Georgetown College, 1949 ; M.A., Baylor, 1950 ; Ph.D., Missouri, 1958.
Mirian Mace, M.F.A., Assistant Professor of Theater. B.A., 1971, M.A., 1974, California State University, Humboldt ; M.F.A., University of New Orleans, 1975.
Thomas D. Prewitt, M.F.A., Instructor, Technical Director of Theater. B.A., 1971, Nevada; M.F.A., 1973, Minnesota.
Deanna M. Robinson, Ph.D., Assistant Professor of Telecommunication (regulation, audiences). B.A., 1964, M.A., 1972, Ph.D., 1974, Oregon.
John R. Shepherd, Ph.D., Professor of Telecommunication (process of visual communication). B.A., 1946, M.A., 1947, Stanford; Ph.D., Southern California, 1952. (On sabbatical leave fall term 1978.)
$J$ F. Thibeau, M.F.A., Assistant Professor of Theater, Lighting Design and Technical Director, University Theater. B.A., Portland State, 1961 ; M.F.A., Oregon, 1971
Jerry R. Williams, M.A., Assistant Professor of Theater. Scenic Designer, University Theater. B.F.A., CarnegieMellon, 1964 ; M.A., Washington, 1965.

Larry D. Wittnebert, Ph.D., Visiting Assistant Professor of Telecommunication and Film Studies (aesthetics of the moving image, television and film production). B.A., 1963, M.A., 1965, California, Berkeley; M.Ed., Hawaii, 1972 ; Ph.D., 1975.

## Faculty Emeriti

Robert D. Clark, Ph.D., Professor
Emeritus of Rhetoric and Communica-
tion (history and criticism of public address). President, University of Oregon. A.B., Pasadena College, 1931; M.A., 1935, Ph.D., 1946, Southern California; LL.D., Santa Clara, 1968 ; at Oregon 1943-64, and since 1969. Kirt E. Montgomery, Ph.D., Emeritus Associate Professor of Rhetoric and Communication (speech education). B.A., Carroll, 1930 ; M.A., 1939, Ph.D., 1948, Northwestern ; at Oregon since 1945.

Horace W. Robinson, M.A., Professor Emeritus of Theater. B.A., Oklahoma City, 1931 ; M.A., Iowa, 1932 ; at Oregon since 1933.
Ottilie T. Seybolt, M.A., Associate Professor Emerita of Speech. A.B., Mount Holyoke, 1910 ; M.A., Wiscon$\sin , 1915$; at Oregon since 1928.
D. Glenn Starlin, Ph.D., Professor Emeritus of Telecommunication (criticism, international broadcasting). Vice-Provost for Academic Planning and Resources. B.A., Idaho, 1938 ; M.A., 1939, Ph.D., 1951, Iowa; at Oregon since 1947.

## Undergraduate Studies

The Department of Speech offers major curricula leading to the Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Fine Arts (in theater only), Master of Science, and Doctor of Philosophy degrees, with opportunities for study in film-making and film analysis, rhetoric and communication, telecommunication, theater, speech education, and communication theory and research.

Work in speech is also offered for students majoring in other fields. For these students, the department directs its efforts toward two principal objectives: (1) the development of the ability to communicate thought and feeling ; and (2) the improvement of powers of appreciation and evaluation in listening and viewing.

Practical experience in the various phases of the departmental program is provided through the University Theater, the University Symposium and Forensic activities, and the Communication Research Center.

In the planning of its major undergraduate programs, the Department of Speech recognizes three principal objectives :
(1) The achievement, by all of its major students, of a broad liberal education.
(2) Sufficient work in the several fields of speech instruction to provide an appreciation of the different areas of communication, including a minimum of

40 credit hours in speech courses, at least 24 of which must be in upperdivision courses.
(3) Concentration in at least one of these fields: film studies, rhetoric and communication, telecommunication, and theater. Undergraduate programs should be developed in conference with an adviser in the field of emphasis.
Secondary School Teaching of Speech or Drama. The Department of Speech offers work to prepare students to teach speech and drama in Oregon public junior and senior high schools. Certification as a secondary teacher with the speech or drama teaching endorsement requires satisfactory completion of a program of teacher education which includes subject matter preparation in the teaching field and preparation in professional education, plus recommendation of the institution in which the preparation was completed. The department offers work toward basic and standard certification endorsement levels in speech and drama.

The University's programs to prepare speech conmmuncation and drama teachers are subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission effective October 15, 1979. Students who are unable to complete preparation for the speech communication or drama endorsement prior to that date (in effect, by the end of Summer Session, 1979) will have to meet requirements for the revised programs which include preparation to qualify also for the Language Arts endorsement.

For specific information regarding requirements for the teaching endorsement in speech or drama, students should consult the departmental endorsement adviser for teacher education, and the Office of Secondary Education in the College of Education. This contact should be made as early in students' programs as possible, but in no case later than winter term of the junior year.
The University will recommend for the Standard Teaching Certificate and Standard endorsements upon successful completion of a planned program of advanced teacher education ; this plan must be filed with the Office of Teacher Certification in the College of Education at the time the work is initiated. Completion of work required for a master's degree does not satisfy requirements for either the Standard Teaching Certificate or endorsement, unless the degree work also includes certificate and endorsement requirements. Program planning forms and
information relating to the University's Standard teacher education program may be had from the Office of Teacher Certification.
Honors. The program is designed to serve a select number of students who are majors in the various areas of the department and who have demonstrated unusual ability and uncommon commitment. The program is administered by a special committee.

## Film Studies

The Film Studies Area of the Department of Speech offers a program leading to the B.A. or B.S. degree, in which film is studied in the tradition of the liberal arts and the humanities. Emphasis is on the history and criticism of world cinema considered as one of the arts, and on film production as a means of personal artistic selfexpression. Students in the program should expect education in film as one of the liberal arts, not professional training for the film industry. In filmmaking courses, the emphasis is on visual literacy, on the development of the student's imagination and creativity, and on mastery of the skills necessary for the planning and production of films which are personal artistic statements.
In film-analysis courses, the emphasis is on understanding films, in terms of structure, theme, style, and meaning. Careful viewing and discussion of as many as possible of the significant works in world film history is always the method and the goal in film-analysis courses. Students in the program seek to know the movies--they will learn how to understand a movie as a significant art object, to know its place (and the place of its creators) in film history, and to be aware of the issue in the history of film criticism to which the movie relates. The Film Studies Area treats film as an art, and its study as a branch of the humanities, not of the social or natural sciences.
Students entering the program may want to concentrate on film history and criticism in order to become knowledgeable in film or to concentrate on filmmaking in order to become eloquent in film. The Film Studies program permits students to emphasize whichever aspect of film study is their chief interest; at the same time it assures that each student has a foundation in both film history and criticism, and in filmmaking.

## Requirements for the Major

Students in Film Studies, whether emphasizing filmmaking or film analy-
sis, will meet the following requirements: (1) Satisfaction of baccalaureate degree requirements of the University; (2) FS 255, FS 256, and FS 257, History of the Motion Picture ; (3) Three terms of courses in filmmaking: TC 341, Introduction to Media Aesthetics, FS 211, Basic Concepts in Visualization, and FS 212, Basic Film Production; (4) Sufficient upper-division courses to make a total of 36 upperdivision hours in the study of film. Upper-division courses meeting this requirement, including both Film Studies Area courses and courses in film offered by other Areas and Departments, are those listed in this Catalog under Film Studies, pp. 141-2, and also those listed each term in the Time Schedute of Classes under Film Studies. Films are exlibited in conjunction with FS 255-6-7 on a two-year module. Students who have taken FS 255-6-7 may enroll in FS 407 Seminar: Film History to study the films shown in the second year of the module. Other upper-division courses concerning film may be accepted for Film Studies major credit upon petition by the student to the Film Studies Area: such approval should be sought before the course is taken.

Elective courses supporting the student's interest in film should also be taken, especially courses in related Areas of Speech (in particular, Theater and Telecommunication), Art and Art History, English, Linguistics, Philosophy, Music, and foreign languages and literatures. A student's progress and intended program should be checked at regular intervals with an adviser to ensure a good foundation in areas of study appropriate to Film Studies.
Satisfactory completion ( C or P grade) of courses for the major is required.

## Graduate Studies in Film

The University of Oregon offers the Master of Arts, the Master of Science, and the Doctor of Philosophy degrees in Speech with concentration in the Film Studies Area. Students are encouraged to become familiar with both film analysis and filmmaking. Graduate programs in filmmaking emphasize creative development of the student working in "personal cinema." Graduate programs in film analysis emphasize detailed study of the films and directors important to film history, the theory and practice of film criticism, and the intellectual background necessary to place film in perspective.

Graduate programs in Film Studies, especially in film analysis, are designed as professional training. Degrees, especially the Ph.D., qualify recipients to teach film history, criticism, theory, and aesthetics on the University level. However, employment opportunities are diminishing. Applicants for admission to the Film Studies Area, therefore, should be prepared to accept the likelihood that their training, although professional in quality, might best be considered a continuation of their liberal arts education. Personal development should result from (1) acquisition of knowledge in depth of a subject matter as intrinsically interesting as film; (2) perfection of research and writing skills ; and (3) comprehension of film in relation to other aspects of modern intellectual life.

Similarly, training in filmmaking should be considered as development of interests and skills rather than preparation for specific jobs. In particular, the University of Oregon should not be regarded as a training ground for the film industry; we offer study in filmmaking as one of the liberal arts, and have neither the equipment nor the personnel to train students in the specific skills of Hollywood film production. But acquisition of knowledge, insight, and skills can be essential in preparing a student for an employment situation, whether in Hollywood or elsewhere, in which specific skills needed on the job can be acquired.
(I) M.A., M.S., and Ph.D. degrees, emphasizing film analysis.
(A Requirements for the M.A. or M.S. (1) 45 hours of graduate courses, and a comprehensive examination. Competence in one foreign language, preferably French, is required for the M.A., but not for the M.S. Proficiency in the language is to be demonstrated (1) by transcript evidence of three terms of $C$ or better work (including $P$ ) at the second-year college level in any language acceptable to the Advisory Committee ; (2) by scoring 450 or above on the GSFLT in one of the languages for which it is available (German, French, or Spanish) ; or (3) by successful completion of local tests administered in languages not covered by GSFLT but acceptable to the student's advisory committee. No foreign language competence is required for the M.S. degree.
(2) Courses as follows: (a) FS 507, Introduction to Film Study (an orientation course emphasizing problems of research and writing on film, and an
overview of the field) ; (b) FS 507, Film Criticism (a three-term study of film criticism and theory. Fall: "Formative" Film Criticism, especially Eisenstein and Arnheim. Winter : Bazin and Auteurism. Spring: Structuralism and Semiology) ; (c) (each term in residence) either FS 495G, Film Directors and Genres (different topic every term; FS 495G studies in depth major [Hitchcock, Renoir] and interesting minor [Borzage, Sirk, Pabst] auteurs, and genres [film noir, Western] ), or, FS 407G, Film History (a six-term survey of international silent, sound, and contemporary films). FS 495 G and FS 407 G may (and in many cases should) be taken concurrently. (d) Other courses in film analysis and filmmaking, and courses in supportive fields as planned with the student's adviser.
(3) The Master's comprehensive exam. There is no thesis requirement for the master's degree in Film Studies ; research and writing skills are developed through the term papers required in FS 495G and other courses and seminars. A principal goal of the master's program, however, is to acquaint the student with the major films in all areas of film history--silent and sound, foreign and Hollywood, commercial and experimental-and to develop the student's ability to discuss the major films in terms of content, style, structure, meaning, and significance. Intimate knowledge of the films is required. A comprehensive examination, consisting of a three-hour written segment and a one-hour oral segment, is required for the master's degree. The master's comprchensive functions as the qualifying examination for admission into the Ph.D. program in Film Studies. The exam may be graded "Fail," "Pass: M.A./M.S. Only," "Pass," or "Pass with Distinction." The final two grades qualify the student to contilue with the Ph.D. program; additional attempts to qualify beyond an initial "Fail" or "Pass : M.A./M.S. Only," may be allowed.
(B) Requirements for the Ph.D. (1) Admission to the program. (a) Students may be admitted to the Ph.D. progran upon completion of the requirements for the master's degree in Film Studies, including passing the master's comprehensive with a grade of "Pass" or better. (b) Students who have an M.A. or M.S. in closely related fields to Film Studies (e.g.. in English, Theater, Fine Arts, Art History, etc.) may be admitted directly to the Ph.D. program if they satisfy the Film Studies staff that their level of accomplishment
in film history, criticism, and aesthetics is the equivalent of an Oregon master's degree in Film Studies. Such satisfaction may require either work in some additional courses or the completion of the master's comprehensive (functioning in these instances simply as a qualifying exam) with a grade of "Pass" or better, or both.
(2) Specific requirements for the Ph.D. (a) Formal course of study. (1) Minimum work in courses. There are no credit-hour minimums for the $\mathrm{Ph} . \mathrm{D}$. on this campus, but the Film Studies Area requires that students in the $\mathrm{Ph} . \mathrm{D}$. program complete formal courses in film and related subjects every term until Advancement to Candidacy for the Ph.D. (that is, until successful completion of the comprehensive examination for the Ph.D.). Specifically, all doctoral students, like all master's students, are expected to take FS 495G, or FS 407 G , Film History, every term. Students who hold Graduate Teaching Fellowships are expected to take, as well, at least one other formal course or seminar every term, and students without Graduate Teaching Fellowships are expected to take at least two additional courses every term in addition to FS 495G or FS 407G, Film History.
(2) Time Schedule. Full-time students without Graduate Teaching Fellowships should seek to advance to candidacy for the Ph.D. after one full year or a little more of courses completed after the M.A. Students who hold Graduate Teaching Fellowships may require one additional year. The writing of the dissertation may be expected to take about a year. (3) Subjects for formal study. In addition to the terms of FS 495G which continue the in-depth study of auteurs, topics, and genres begun during the master's program, the doctoral student should take: other courses and seminars offered specifically in film-analysis topics; courses and projects in filmmaking, in accordance with personal interest in developing that skill; and as extensive a range as possible of courses in subjects which are significant as background to film criticism and theory.
(b) The Ph.D., comprehensive. The Ph.D. comprehensive is similar to the master's comprehensive in that it covers the whole range of film history. The exam differs from the master's comprehensive in two major ways: it demands a much more extensive and intensive knowledge of the films, filmmakers, and trends of film history, as is appropriate for students who have spent an additional year or more
studying film; it expects knowledge not only of films and film-makers, but of the critical tradition concerning them. Segments of the Ph.D. comprehensive may also deal with the history of film criticism and theory, and with the relations between the background fields studied by the student and the traditions in film theory to which they relate.

The Plı.D. comprehensive will be mostly a written exam of substantial length, but there may be an oral segment as well. For the establishing of its specific form and of the content over which the student will be examined, a committee from the Film Studies staff (with outside members where appropriate) will be formed in advance of the exam and will meet with the student. This committee will be called the student's "comprehensive committee," and may or may not be asked to function as a doctoral committee after Advancement to Candidacy.

The Ph.D. comprehensive may be passed as a whole (with grades of "Pass" or "Pass with Distinction"), failed as a whole, or passed in part and failed in part. The comprehensive committee will determine if the entire exam or some explicit number of segments of it must be attempted again and passed before Advancement to Candidacy is granted. The committee also may require either work in certain specific courses or supplementary reading and viewing or both before the exam or segment ( $s$ ) are attempted a second time.
(c) The Ph.D. dissertation. The doctoral candidate after Advancement to Candidacy will arrange with a member of the Film Studies staff for the supervised research program which will lead to the writing of a doctoral dissertation. Dissertations in Film Studies will embody either the results of research into film history, aesthetics, or criticism or all three, and will show evidence of originality and ability in independent investigation. There will be a final oral examination over the subject of the dissertation.

## Undergraduate Courses

FS 199. Special Studies. 1-3 credit hours. Topics to be announced.

## FS 199. History Of The Motion Picture.

 2 credit hours. Additional films and discussion for each of the three terms of FS 255, 256, 257 (concurrent registration required).FS 211. Basic Concepts in Visualization. 3 credit hours. An introduction to the theory and practice of cinematic pictorial continuity. Lectures cover elements of film grammar complemented with examples. Students will
complete a series of exercises of graduated difficulty applying principles covered in class.
FS 212. Basic Film Production. 3 credit hours. Extension and practical application of the principles of pictorial continuity covered in FS 211. Lectures and demonstrations will provide an introduction to the techniques of operating the basic tools of filmmaking, including cameras, projectors, editors, and splicing devices. Each student will complete two filmmaking exercises.

## FS 255, 256, 257. History of The Motion

 Picture, 3 credit hours each term. Study of the history of the motion picture as an art form. Fall term ; the silent era. 1895-1928; Winter term : the sound era, 1928-1965; Spring term: contemporary cinema. Cutler, staff.FS 292, 293, 294. The Great Filmmakers. 3 credit hours each term. Introduction to film criticism through a study of the great directors. First term : Eisenstein, Griffith, Murnau, Lang, Sternberg; second term : Ford, Hawks, Ophuls, Renoir, Hitchcock : third term : Antonioni, Fellini, Bergman, Godard, Ozu, Mizoguchi. Cadbury, staff. Not offered 1978-79.

## Upper-Division Courses Carrying Graduate Credit

FS 401. Research. (G) Credit hours to be arranged.
FS 405. Reading and Conference. (G) Credit hours to be arranged.
FS 407. Seminar. (G) Credit hours to be arranged.
FS 407. Seminar: Film History. 5 credit hours. Open to undergraduate and graduate students who have completed FS 255, 256, 257 in the alternate year of the two-year module. This study treats the film shown in the other year of the module on an advanced level. Cutler.
FS 408. Workshop. (G) Credit hours to be arranged.
FS 409. Practicum. (G) Credit hours to be arranged.
FS 410. Experimental Course. (G) Credit hours to be arranged. Topics in filmmaking and film criticism to be announced.
FS 455. Motion Picture Editing. (G) 3 credit hours. The mechanics, techniques, and principles of editing 16 mm film. Cutler.
FS 456. Motion Picture Planning. (G) 3 credit hours. Logistical problems of producing a film and methods of notating ideas. Prerequisite : FS 455, or consent of instructor. Cutler.
FS 457. Motion Picture Production. (G) 3 credit hours. A workshop in motion picture production. Each student makes a short 16 mm film and assists in the production of one other film. Prerequisite : FS 455, and 456, or consent of instructor. Cutler.
FS 495. Film Directors and Genres [Term Subject]. (G) 3 credit hours any term. Interpretation of films and analysis of film history, aesthetics, and criticism, through the techniques developed in modern film criticism. Typical offerings: surveys of film history (e.g.; "The Twenties") ; studies of types (e.g., "The Western") ; close analysis of a few auteurs (e.g., "Ford and Capra," "Sirk, Minnelli, Renoir"). The course may be repeated for credit and is recommended for Film Studies majors as the fundamental
upper-division course in film history and criticism. Cadbury.
CI 435. Educational Media. (G) 4 credit hours.
ArH 481. History of Photography. (G) 3 credit hours.
ArH 482. Nonfiction Film. (G) 3 credit hours.
Art 493. Visual Continuity. (G) $2-4$ credit hours any term.
Art 484. Advanced Photography. (G) 2-4 credit hours any term.
Art 495. Motion Graphics. (G) 2-4 credit hours any term.

## Graduate Courses

FS 501. Research. Credit hours to be arranged. A no-grade course.
FS 503. Thesis. Credit hours to be arranged. A no-grade course.
FS 505. Reading and Conference. Credit hours to be arranged.
FS 507. Seminar. Credit hours to be arranged.
FS 507. Seminar: Introduction to Film Study. 1 credit hour. Orientation emphasizing problems of research and writing on film, and an overview of the field. Cadbury.
FS 507. Seminar: Film Criticism. 3 credit hours. A three-term study of film criticism and theory. Fall: "Formative" Film Criticism, especially Eisenstein and Arnheim. Winter : Bazin and Auteurism. Spring : Structuralism and Semiology. Cadbury.
FS 509. Practicum. Credit hours to be arranged.

## Rhetoric and Communication

The Department of Speech, through its rhetoric and communication program, seeks to give its undergraduate students competence, and a knowledge and appreciation of the various forms and levels of human communication.

Students study the theories of rhetoric and communication and develop abilities in the various forms of public communication. They develop competence in using the tools of communication research, gain a knowledge of the role of public discourse in history, and become familiar with collateral material in and outside the field of speech.

All courses in rhetoric and communication are available on a passundifferentiated basis. However, students majoring in the program must take all courses required for their major on a graded (pass-differentiated) basis with a grade of C or better, with the exception of RhCm 409 Practicum.

In addition to all baccalaureate degree requirements of the University, the following minimum requirements are specified for students with a major emphasis in rhetoric and communication ; two or three of the following : Fundamentals of Speech Communication (RhCm 121), Fundamentals of Persuasion (RhCm 122), Fundamen-
tals of Small Group Communication (RhCm 123), Fundamentals of Interpersonal Communication ( RhCm 124 ) ; Theory and Literature of Rhetoric ( $\mathrm{RhCm}_{\mathrm{Cm}} 301,302,303$ ) ; The Logic of Argument (RhCm 321) ; Persuasion ( RhCm 322 ) ; Group Communication ( RhCm 323 ) ; any two of the following, except that only two hours may come from RhCm 221, 331, or 332 : Public Discussion (RhCm 221), Advanced Public Discussion (RhCm 331), Advanced Public Discussion (RhCm 332), Practicum (RhCm 409), Directing the Forensic Program (RhCn1 418), and Public Address (RhCm 435) ; three of the following: Speecl Communication Theory ( RhCm 431 ), Speech Communication and Group Process (RhCm 432), Communication, Media, and Aging (RhCm 433), Nonverbal Communication (RhCm 434), Seminar in Interpersonal Communication ( RhCn 1407 ), Reticent Communication (RhCm 407), and Theory of Mass Communication (Tc 433) ; any two of the following : Rhetorical Theory: 400 B.C.-1 A.D. (RhCm 414), Rhetorical Theory: 1 A.D.-800 A.D. (RhCm 415), and Public Discourse in the United States ( RhCm 422 , 423) ; any two of the following : Ethics of Persuasion (RhCnı 424), Freedom of Speech (RhCm 425), Backgrounds of Black Protest Rhetoric ( RhCm 426 ), and Contemporary Protest Rhetoric ( RhCm 427) ; a minimum of 8-9 additional credit hours in courses approved by the student's adviser in either Film Studies, Telecommunication, Theater, or Speech Pathology and Audiology in the College of Education, or a combination of these ; and a minimum of 9 upper-division credit hours of courses approved by the student's adviser in a single related field (but not necessarily in one department) outside the Department of Speech. Students are cautioned to consult with their advisers about their selections. For secondary school certification, please see Secondary School teaching of Speech or Drama, page 139 of this catalog.

## Graduate Studies in <br> Rhetoric and Communication

The University of Oregon offers the Master of Arts, the Master of Science, and the Doctor of Philosophy degrees in Speech with concentration in the area of rhetoric and communication.

Although graduate students are encouraged to develop more than minimal familiarity with the several areas of rhetoric and communication and at least minimal familiarity with
other areas of the field of speech, they will also elect a major interest in rhetorical theory, history and criticism of public address, forensics, communication theory, or speech pedagogy.

Before completion of first term registration, graduate students are obliged to consult with a member of the faculty. Before conclusion of the first term, each graduate student is expected to exert personal initiative in obtaining an adviser. Some students will know at the beginning of the first term on campus which professor they wish to have as an adviser and are free to approach the professor ; others may not be prepared to make such a choice until later in the first term. A student whose graduate plans are altered should not hesitate to seek a change in adviser ; such changes are made without embarrassment on anyone's part.

A courses in a graduate student's degree program must be taken on a graded basis unless the course is available on a Pass-No Pass basis only or unless the Pass-No Pass option is approved by the graduate student's advisory committee.

All graduate students should consult the general University regulations governing graduate study in the Graduate School section of this catalog.
Master's Degree Requirements. With but one exception, the language requirement, requirements for the M.A. and M.S. degrees are identical. For the M.A. degree, the student must show competence in a foreign language. That competence may be demonstrated by meeting any of the following options:
(1) by scoring 450 or above on the GSFLT in one of the languages for which it is available (German, French, or Spanish) ; (2) by successful completion of local tests administered in languages not covered by GSFLT but acceptable to the student's Advisory Committee ; or (3) by transcript evidence of three terms of C or better work at the second year college level in any language acceptable to the Advisory Committee. No foreign language competence is required for the M.S. degree.

Students entering the master's program are expected to have acceptable undergraduate preparation in rhetoric and communication or cognate subjects. Those students accepted for work toward the degree who do not meet this expectation may well be required to take specified undergraduate courses or additional hours of graduate courses beyond the minimal requirement for the degree.

A minimum of 45 credit hours (not
more than 9 credit hours of which may be taken for thesis) is required for the master's degree with the thesis option. A minimum total of 51 credit hours is required for the nonthesis option. Those who elect the nonthesis option must include on their programs a minimum of 12 credit hours from outside the Department of Speech; those who elect the thesis option must include on their programs a minimum of 9 credit hours from outside the Department of Speech.
All candidates for the master's degree are required to take a qualifying exanination, preferably during their first term in residence or before they have completed 15 credit hours of graduate work. The qualifying examination consists of both written and oral portions ; those students who successfully complete the examination are advanced to candidacy for the master's degree.

The only specifically required course for the master's degree is Research Methods in Rhetoric and Communication. The remainder of the program is designed by the candidate, the adviser, and the candidate's graduate committee.
An examining committee administers each student's final examination at or near the completion of the student's work. The committee consists of three to five members nominated by the student's adviser and approved by the department chairman. A minimum of two of the members will be from the rhetoric and communication area and, usually, a minimum of one of the members will be from another department or another area of the Department of Speech. In the instance of students taking the thesis option, the examination is oral and of not less than two hours' duration ; students who do not present a thesis will take a comprehensive written examination of not less than eight hours followed by an oral examination of not less than one hour.
Doctor of Philosophy Degree Requirements. Each student's doctoral program is designed for the student with the rationale that it provides the general background required in the broad area of rhetoric and communication, and the specific support needed for the student's area of specialization and research. Unlike the master's degree, the Ph.D. has no specified number of credit hours which candidates for the degree must take. The doctorate usually represents the equivalent of three acadenic years of full-time study beyond the bachelor degree; doctoral students who are serving as graduate teaching fellows or graduate assistants, and hence carry lesser academic loads, or who are taking work outside their
official program of study, should realize that their work on their academic program during that time is less than "full-time."
Preferably, during the student's first term on campus or before completion of 15 credit hours of work, the Ph.D. student is required to take a qualifying examination, which, when passed, permits continuation of work on the degree. The examination, written and oral, is administered by a conmittee selected by the Area faculty. The examination is designed to measure previous accomplishment and diagnose future needs. If previous accomplishment is judged adequate, the student is passed and analysis of the results of the examination is used in planning the student's program by the permanent adviser and the advisory committee.
The student's advisory committee, appointed by the head of the department on the recommendation of the student's permanent adviser, is responsible for approving the total study progrann. Preferably the program planning will occur shortly after the qualifying examination and in no case later than the close of the student's first year of residency. The committee will receive the proposed study program prepared by the student and the permanent adviser, make what changes it deems necessary, and approve the resulting progran.

Program Requirements. Doctoral students will complete a program of study which is equivalent to three academic years of full-time study beyond the bachelor degree. That program will be worked out in consultation with the student's adviser, be approved by the student's advisory committee, and will include a minimum of 9 graduate credit hours in a department or departments other than the speech department and apart from any graduate level work completed in satisfying requirements described below.
Language Research Tool, Related Discipline Requirements. Two of the following three options must be chosen to fulfill the requirements : (A) Language. Proficiency may be demonstrated: (1) by scoring 450 or above on the GSFLT in one of the languages for which it is available (German, French, or Spanish) ; (2) by successful completion of local tests administered in languages not covered by GSFLT but acceptable to the student's advisory committee; or (3) by transcript evidence of three terms of C or better work at the second year college level in any language acceptable to the advisory committee. (B) Research Tool.

Completion of a three-term course of study leading to the development of a research tool relevant to the student's particular program. The work offered by the student in satisfying this requirement must be approved by the student's advisory committee. For example, a student's program may require such tools as computer programming, historiography, or statistics. (C) Related Discipline. Completion of a three-term course of study, in a single related discipline. The work offered by the student in satisfying this requirement must be approved by the advisory committee. The following options, although not exhaustive, are typical of sequences and alternatives taken by the doctoral students: (1) statistics; (2) computer programming ; (3) linguistics; (4) language, culture, and behavior; (5) a second language (to be certified by any procedure outlined above suitable for satisfying the language requirement) ; (6) high proficiency in the language used in satisfying the language requirement (90th percentile on GSFLT national nornis or native language proficiency in reading, writing, and speaking through local tests).

Comprehensive Examination. A doctoral student may take the comprelensive examination only after completing substantially all of the program requirements and after completing the approved options in the language, research tool, and related-discipline requirements.

The comprehensive examination, prepared by the student's advisory committee, consists of written and oral portions covering all areas of concentration and such supporting areas as the committee wishes to examine. Successful completion of the examination and other required work advances the student to doctoral candidacy.

Every doctoral candidate is required to present a dissertation embodying the results of research and showing evidence of originality and ability in independent investigation.

An examining committee appointed by the Dean of the Graduate School and consisting of the candidate's advisory committee and other members, including at least one not a member of the Department of Speech, administers the candidate's final exanination. The final examination, which must be taken not later than three calendar years after advancement to candidacy, consists of an oral defense of the dissertation by the candidate together with the obligation to respond to questions over the major field with which the dissertation is not directly concerned.

Failure to complete the final examination successfully within three years after advancement to candidacy will result in invalidation of the student's comprehensive examination.

## Undergraduate Courses

RhCm 121. Fundamentals of Speech Communication. 3 credit hours. Basic concepts of personal communication skills. Projects in extempore speaking and analysis of the process of communication. Emphasis on interpersonal communication and speaker audience relationship.
RhCm 122. Fundamentals of Persuasion. 3 credit hours. Basic concepts of audience analysis, persuasion, attitude change. Projects in preparing and analyzing persuasive messages.
RhCm 123. Fundamentals of Small Group Communication. 3 credit hours. Basic concepts of small group interaction. Projects emphasize participation in and analysis of communication in the small group.
RhCm 124. Fundamentals of Interpersonal Communication. 3 credit hours. Provides theoretical understanding and practical skills for examining and altering interpersonal communication. Consideration is given exchange theory, content and relationship aspects of interpersonal communication, listening and speaking skills, inter personal bargaining, functional arguing, and other elements affecting face-to-face communication. S. Glaser, P. Glaser.

RhCm 199. Special Studies. 1-3 credit hours.

## RhCm 199. Developing Communication

 Competence. 3 credit hours. Designed to help students discover ways of solving their particular communication problems in one-toone, small group, and public-speaking situations. Students learn to define specific communication goals which can be accomplished throughout the course of instruction. S. Glaser. P. Glaser. Graded P/NP only.
## RhCm 200. SEARCH. 1-3 credit hours.

RhCm 221. Public Discussion. 2 credit hours. Preparation of speeches for delivery before competitive public audiences in conjunction with the University's forensic program. Consent of instructor is required.
RhCm 235. Great Speeches. 3 credit hours. Systematic study of selected speeches of British and American orators. Friedman, Leistner. Not offered 1978-79.
$\mathrm{RhCm}^{201}, 302,303$. Theory and Literature of Rhetoric. 3 credit hours each term. Selected readings on the principles of rhetoric and public address from Plato to modern times. LaRusso.
RhCm 321. The Logic of Argument. 3 credit hours. The study of principles of reasoning and evidence, particularly as they apply to oral discourse. Includes theory and practice. Friedman.
RhCm 322. Persuasion. 3 credit hours. The study of motivation and audience adaptation, particularly as they apply to oral communication. Includes theory and practice. Carmichael, Leistner.
RhCm 323. Group Communication. 3 credit hours. Study of small-group behavior as it specifically relates to communication. Includes theory and practice. P. Glaser.
RhCm 331, 332. Advanced Public Discussion. 2 credit hours each term. Preparation of speeches to be delivered before competitive and public audiences in conjunction with the

University's forensic program. Special emphasis is placed on the acquisition of advanced skills in public address. Consent of instructor is required.
RhCm 400. SEARCH. 1-3 credit hours.
RhCm 416. Speech Composition. 3 credit hours any term. Speech forms, types and techiniques ; emphasis on application of basic rhetorical elements. Designed for prospective high-school teachers and other nonmajors. Prerequisite : upper-division standing. Friedman, Leistner. Not offered 1978-79.

## Upper-Division Courses Carrying Graduate Credit

RhCm 405. Reading and Conference. (G) Credit hours to be arranged.
RhCm 406. Special Problems. (G) Credit hours to be arranged.
RhCm 407. Seminar. (G) Credit hours to be arranged unless other wise noted.
Teaching Strategies for Speech and Theater. 3 credits. S. Glaser, P. Glaser. Emphasis on integration of teaching and learning concepts with skill in teaching speech and theater. Specific attention is given to questioning techniques, lecturing skills, design and evaluation of performance objectives, and use of small groups.
Reticence. 3 credits. S. Glaser, P. Glaser. Examination of the problems associated with reticence, a generalized and diffuse feeling of apprehension and anxiety directed toward most all communication situations. Reticence will be viewed as a learning problem and a communication deficiency. Concepts and methods will be provided for understanding, identifying, and altering reticent behavior.
Interpersonal Communication. 3 credits. P. Glaser, S. Glaser. Examines human interaction as it affects relationship formation. Attention is directed toward various theoretical approaches concerning the development of interpersonal communication patterns, how stages of relationship progress and develop through a sequence of exchanges, how dysfunctional patterns of communication tend to disintegrate interpersonal relationships.
RhCm 408. Workshop. (G) Credit hours to be arranged.
RhCm 408. Workshop: Marital Communication. (G) 3 credit hours. Enhancement of interpersonal communication skills of people involved in intimate relationships through lecture-discussion and focused activities. Couples learn to understand their own relationship and develop appropriate alternatives to indirectness, vagueness, and unnecessary conflict. S. Glaser, P. Glaser. Graded P/NP only.
RhCm 409. Practicum. (G) Credit hours to be arranged. Supervised laboratory work of a project nature, including the preliminary. study, development, and execution of major artistic or public service experiments.
RhCm 410. Experimental Course. (G) Credit hours to be arranged.
RhCm 414. Rhetorical Theory: 400 B.C.1 A.D. (G) 3 credit hours. Studies of major rhetorical works and movements developed during the Grecian periods. Special attention will be given to the relation of certain rhetorical developments and the cultural influences of those times. LaRusso.
RhCm 415. Rhetorical Theory: 1 A.D.800 A.D. (G) 3 credit hours. Studies of major rhetorical works and movements developed during the Roman and Carolingian periods. Special attention will be given to the relation of rhetorical developments and the
socio-intellectual metamorphosis of the period. Prerequisite: $\mathrm{RhCm} 301,302,303$, or consent of instructor. LaRusso.
RhCm 418. Directing the Forensic Program. (G) 3 credit hours. Content, procedures, and methods in directing a forensic program at the high school, college, and university levels.
RhCm 422, 423. Public Discourse in the United States. (G) 3 credit hours each term. History and criticism of public discourse in the United States. First term : from the colonial period to 1912. Second term : from 1912 to the present. In each course for its appropriate period the concentration is on the role of rhetoric as a force for change in areas of public controversy. Friedman, Leistner.
RhCm 424. Ethics of Persuasion. (G) 3 credit hours. Study of different positions on the ethics of persuasion, development of individual ethical postures for students in their own persuasive efforts, and ethical appraisals of contemporary persuasion. Friedman.
RhCm 425. Freedom of Speech. (G) 3 credit hours. History and development of freedom of speech in the United States. Friedman.
RhCm 426. Backgrounds of Black Protest Rhetoric. (G) 3 credit hours. Survey of themes and rhetorical strategies in public disputation about the role of blacks in America from Colonial times to the Brown vs. Board of Education decision. Leistner.

## RhCm 427. Contemporary Protest

Rhetoric. (G) 3 credit hours. Analysis of the role of rhetoric in contemporary protest movements. Attention is given to black protest from the nonviolent civil rights movement through black power protest, as well as protest rhetoric in behalf of women's rights, minority rights, free speech, the anti-war movement, prisoner's rights, among others. Leistner.
RhCm 430. Quantitative Methods in Speech. (G) 3 credit hours. Empirical and experimental methods of research in speech communication. Introduction to the experimental method, frequently used statistics, experimental design, problems in empirical research, and philosophical problems in quantitative research. Carmichael,
RhCm 431. Speech Communication Theory.
(G) 3 credit hours. Survey of the experimental literature relevant to speech comnunication. Includes studies of models of the communication process, audience, message, and speaker variables, and the teaching of speech. Carmichael.
RhCm 432. Speech Communication and the Group Process. (G) 3 credit hours. Survey and analysis of small-group literature relevant to speech communication. Major areas: group formation, group tasks, group effectiveness and efficiency, status problems, leadership, problem-solving and conflict resolution, communication in discussion, social power and social control, organizational techniques and problems. Carmichael.
RhCm 433. Communication, Media, and Aging. (G) 3 credit hours. Examination of the communication-related problems of aging; survey of communication-gerontology research literature ; and consideration of the use of communication systems in analyzing and solving various problems of aging.
RhCm 434. Nonverbal Communication. (G) 3 credit hours. Aspects of the nonverbal dimensions of interpersonal communications. Psycholinguistic, psychiatric, kinesic, and perceptual theories of Hall, McLuhan, Birdwhistell, Ruesch, and others, with emphasis upon their contributions to the isolation and
developments of the factors of time, space, form, material, and action. LaRusso.
RhCm 435. Public Address. (G) 3 credit hours. Theory of speechmaking, with study of the texts of speeches by modern orators; practice in preparation of speeches adapted to the professional requirementsts of students. Consent of instructor is required. Friedman, Leistner.

## Graduate Courses

RhCm 501. Research. Credit hours to be arranged. A no-grade course.
RhCm 502. Supervised College Teaching. Credit hours to be arranged.
RhCm 503. Thesis. Credit hours to be arranged. A no-grade course.
RhCm 505. Reading and Conference. Credit hours to be arranged.
RhCm 506. Special Problems. Credit hours to be arranged.
RhCm 507. Seminar. Credit hours to be arranged unless noted otherwise.
Problems of Teaching Speech.
History of Speech Education.
Rhetoric of Black Power
Persuasion.
Theory of Argumentation.
Contemporary Topics.
Rhetoric of the Presidential Campaign.
Communication and Language. 3 credits.
Carmichael. A survey of various approaches to the study of language focusing on theories of language origination, language acquisition, general semantics, and various language experiments in communication research.
RhCm 508. Workshop. Credit hours to be arranged.
RhCm 509. Practicum. Credit hours to be arranged. For description, see RhCm 409.
RhCm 510. Experimental Course. Credit hours to be arranged.
$\mathrm{RhCm}^{510 .}$ Interpersonal Communication
Instruction. 3 credit hours. Theory and instructional procedures for the teaching of interpersonal communication. Students will attend sessions of RhCm 124 , Fundamentals of Interpersonal Communtication, as well as meet twice a week with instructor to discuss additional readings and papers. Especially relevant for graduate students in speech and counseling, as well as to high school counselors and speech teachers. S. Glaser.
RhCm 510. Reticence Instruction. 2-3 credit hours. Theory and instructional procedures for teaching interpersonal skills to reticent individuals. Students will assist in the instruction of RhCm 199, Developing Communication Competence, as well as meet twice a week with instructor to discuss additional readings and papers. Especially relevant to graduate students in speech counseling, and clinical psychology, as well as to high-school counselors and speech teachers. S. Glaser.
RhCm 511. Research Methods in Rhetoric and Communication. 3 credit hours. Examination of research methodologies useful in scholarly investigation in rhetoric and communication; survey of historical, descriptive, and experimental research in rhetoric and communication ; introduction to scholarly writing including documentation requirements, organizational patterns, and acceptable style ; familiarization with leading research resources; and opportunity to do original research. Friedman.
RhCm 513. Rhetorical Theory: 1450-1600. 3 credit hours. Studies of major and minor works in rhetoric developed in France, Germany, Spain, and Italy during the late

Middle Ages and Renaissance. Concerin will be with the relation of these works and the socio-intellectual focus of the periods. Latini, Dante, Valla, Erasmus, Vives, Ranus, Cavalcanti, and others are considered. LaRusso.
RhCm 514. Rhetorical Theory: 1700-1900. 3 credit hours. Studies of rhetorical and relevant nonrhetorical works for the purpose of determining the reciprocal influence among rhetoric and the developing trends in psychology, aesthetics, logic, literary criticism, etc. Descartes, Locke, Campbell, Hume, Valla, Blair, Whately, Adams, and others are considered. LaRusso.
RhCm 515. Modes of Rhetorical Criticism. 3 credit hours. Examination of contemporary perspectives and methods of rhetorical criticism through theoretical and applied studies. Attention to the intersection of rhetorical and communication theory. Friedman, Leistner.
RhCm 523. Problems in Research Writing. 3 credit hours. A study of the problems in writing and rewriting of the results of scholarly investigations for thesis production and for publication. Friedman, Leistner.
RhCm 530. Attitude Formation and
Change. 3 credit hours. Survey and analysis of research in speech communication relevant to attitude formation, change, measurement, and definition. Prerequisite: RhCm 430 , or consent of the instructor. Carmichael.

## Telecommunication

The Telecommunication Area is concerned with instruction in basic elements of broadcasting and communication theory, along with appropriate laboratory practice in the broadcast studio. The academic program attempts to educate the student in the nature, functions, and capabilities of the mass media in contemporary society through a combination of studies in selected liberal arts and professional disciplines. This includes knowledge and understanding of radio, television, and community antenna systems to prepare students for a career in public or educational broadcasting, in commercial broadcasting, in teaching or research in telecommunication, or to help them to be more informed and concerned citizens as listener-viewers of broadcasting. Women and ethnic minorities are encouraged to consider the academic and career opportunities which exist in this field.

Although no special preparation is required for entering freshmen, students planning to transfer from two-year colleges are strongly advised to fulfill the University's group requirements prior to transfer. The transfer student is also advised to complete as many of the lower-division courses required of a telecommunication major as possible at the two-year college.
The telecommunication area offers both the Bachelor of Arts and Bachelor of Science degrees for undergraduates. At the undergraduate level, students are required to include study in the
areas of mass communication theory, broadcast history and regulation, studio procedures, performance, and production, writing, and criticism; and to stipplement liberal arts courses in the social sciences with course work in music, drama, literature, or art to enliance their knowledge and appreciation of potential program content. Students are likewise encouraged to acquaint themselves with the business, advertising, news, and educational aspects of broadcasting through electives from other departments. Students may also enrich their media experience through participation in all phases of production in the radio and television studios.

Area majors must complete a minimum of 30 credit hours of upperdivision coursework within the area. A minimum of 40 credit hours must be completed within the Department. All courses required for Telecommunication Area majors must be taken on a graded basis if offered with the Tc prefix. All courses used to satisfy the degree requirements or credit hour minimums established by the Telecommunication Area or the Department of Speech must be passed with a grade of C or better.

Courses required (in addition to all University requirements for the Bachelor degree) : Fuindamentals of Speech (RhCm 121) ; Interpretation (Th 229) or Elements of Acting (Th 251) ; Fundamentals of Broadcasting (Tc 241), Introduction to Media Aesthetics (Tc 341 ) ; Radio Workshop (Tc 342) ; Television Worksop (Tc 344 ) ; Radio-Television Writing (Tc 347 ) ; Theory of Mass Communication (Tc 433) ; Radio-Television and the Public (Tc 448) ; Government Regulations of Broadcasting (Tc 449) ; Radio-Television News I (J 431) or Principles of Advertising (I 341) ; Introduction to Music and its Literature (one term of Mus 201, 202, or 203) ; and one course from the following: Survey of Dramatic Art (Th 367-369) ; Film Directors and Genres (FS 495).

Courses identified with a major in the Area are listed in two categories : first, the core courses required of all majors and, second, the courses recommended for the field of emphasis developed by the student. A system of prerequisites has been established for certain courses. The student must successfully complete Tc 241, Fundamentals of Broadcasting, and Tc 341, Introduction to Media Aesthetics, before enrolling in either Tc 342, Elementary Radio Workshop, or Tc 344, Elementary Television Workshop, which, in turn serve as prerequisites for the advanced work-
shops, Tc 343 or Tc 345 . Advanced television Workshop (Tc 345) or its equivalent serves as a prerequisite for both Television Staging and Lighting (Tc 372) and Television Direction ( Tc 445G).

The model programs presented below represent patterns of past student interest. New students are expected to develop a degree program appropriate to their interests in consultation with their faculty adviser whom they are required to consult at least once per term. Students are also expected to develop, in consultation with their advisers, a minor field of study consisting of at least 18 credit hours of related upper-division courses outside of the Area. For purposes of illustration, the following electives are suggested, but not required, for students who wish to emphasize one of these areas of specialization. Courses identified which are offered outside of the Area may be included in the minor field of study if applicable.

## Suggested Programs:

Mass Communication Theory:
Tc 242 Social Impact of Television
Soc 306 Social Psychology
Soc 326 Quantitative Methods in
Sociology OR RhCm 430 Quantitative Methods in Speech
Soc 327 Introduction to Social
Research
RhCm 431 Speech Communication Theory
RhCm 434 Nonverbal Communication
J 494 Journalism and Public Opinion
Tc 407 Communication and Social Change
Tc 407 Children and Television
Tc 407 Audience Analysis
Tc 407 Design for Communication Experiments
Tc 407 Mass Media and Politics

## Television Production:

FS 495 Film Directors and Genres FS 255, 256, 267 History of the Motion Picture
FS 292, 293, 294 The Great Filmmakers
FS 455 Motion Picture Editing
FS 456 Motion Picture Planning
FS 457 Motion Picture Production
Art 493 Visual Continuity
Art 495 Motion Graphics
Tc 345 Advanced Television Workshop
Tc 372 Television Staging and Lighting
Tc 431 Theory and Criticism of
Television Drama
Tc 444 Concepts in Visual Production Tc 445 Television Direction
Tc 446 Radio-Television Programming

Tc 407 Problems of Public Broadcasting
Public Affairs Broadcasting:
RhCm 425 Freedom of Speech
Phl 307-309 Social and Political
Philosophy
J 250 Journalistic Writing
J 361 Reporting I
J 462 Reporting II
I 431 Radio-TV News I
J 432 Radio-TV News II
J 408 Radio News Workshop
J 408 TV News Workshop
J 485 Law of the Press
J 494 Journalism and Public Opinion
J 463 The Journalistic Interview
Tc 407 Mass Media and Politics
Tc 407 Problems of Public Broadcasting
Broadcast Sales and Management:
J 407 Radio-Television Station Management
J 341 Principles of Advertising
J 442 Media of Advertising : Broadcast
J 444 Advertising Campaigns
J 445 Advertising Agencies
J 446 Advertising Copywriting
J 448 Advertising Research
J 459 Principles of Public Relations
J 465 Public Relations Writing
Tc 407 Alternate Broadcast Systems
Tc 446 Television Programming
Ac 221 Introduction to Accounting
Ac 323 Managerial Accounting
Fin 316 Systems and Analysis
Mkt 361 Analysis of Consumer
Behavior
Mkt 199 Introduction to Management

Graduate Studies in
Telecommunication
Graduate students' academic programs are designed around particular combinations of interests which find expression in research leading to the writing of a master's level research paper or thesis or a doctoral dissertation. Although studio competence is expected of all Telecommunication Area students, graduate work is most often directed to the functions and effects of the media as related to a significant aesthetic, social, political, economic, or educational problem. This emphasis is reflected in those selected for admission to graduate study in the area, many of whom have earned undergraduate degrees in other fields.

The Telecommunication Area maintains programs leading to the M.A., M.S. and Ph.D. degrees. Generally, a master's program takes two years beyond the bachelor degree. A doctoral program might be expected to take four years beyond the bachelor degree.

The following courses are required of all graduate students: Theory of Mass Communication (Tc 433G) ; Visual Concepts (Tc 444G) ; Research Methods (Tc 507) ; Radio-TV and the Public (Tc 448G) ; Theory and Criticism of Broadcasting (Tc 541). The remainder of any graduate degree program is designed by the candidate and the appropriate Thesis or Degree Program Committee.

During the first term of residency, students accepted for admission to graduate study in the Area will be administered a Qualifying Examination and interviewed by a faculty committee for the purpose of identifying a general focus for their graduate programs. The final expression of course requirements in a specific degree program is the responsibility of the student's thesis committee or degree program committee. To maintain status within the Area, students must make satisfactory progress through the curricular requirements identified by their program committees.
Master of Arts and Master of Science Degrees. The student has the following options:
(1) Thesis. A minimum of 45 credit hours (not more than 9 credit hours of which may be taken for thesis) is required for this option. A minimum of 15 credit hours must be taken from outside the Department of Speech. It is anticipated that all students preparing for doctoral study will use the thesis option.
(2) Non-Thesis. Involves the expansion of coursework taken in lieu of the 9 thesis hours to 15 , making the total coursework requirement for this option a minimum of 51 ( 15 of which must be taken outside of the Department of Speech), a Comprehensive Examination and a Research Paper of acceptable quality. The nature of the coursework is subject to the approval of the student's Degree Program Committee (two members from the Tc Area and one member representing an "outside" area). This committee also prepares and administers the Comprehensive Examination and receives for approval the Research Paper.
Doctor of Philosophy Degree. There are no credit-hour minimums in doctoral programs on this campus; however, the normal expectation is three years of coursework beyond the bachelor degree, or approximately 135 credit hours, including the master's degree. A Comprehensive Examination is administered at or near the completion of all formal coursework outlined in the student's doctoral program.

Advancement to Candidacy for a Ph.D. degree is granted upon successful completion of the Comprehensive Examination. A student who fails to pass this examination by the second try (the Comprehensive Examination Committee may require that all or part of it be retaken with or without the benefit of additional coursework) must understand that a place within the Tc Area's quota will not be maintained. Doctoral programs include a research tools requirement which consists of the completion of a minimum of 18 credit hours study leading to the development of research tools relevant to the student's particular program, as recommended by his or her doctoral committee.

The following options, although not exhaustive, are typical of sequences and alternatives taken by the doctoral student: (1) statistics; (2) computer programming ; (3) linguistics; (4) language, culture, and behavior; (5) philosophy (including aesthetics, logic, ethics) ; (6) psychology; (7) criticism (including film, literature, drama) ; (8) foreign languages, proficiency to be demonstrated by three terms at the second year college level, or by appropriate tests.
General Information. Students applying for admission to graduate study should comply with all general University regulations governing graduate admission which appears in the Graduate School section of this catalog. In addition, applicants must provide transcripts of all college work, GRE scores, (Verbal Quantitative, Analytical) at least three personal recommendations, and a brief statement of academic and career goals. Nonnative speakers of the English language must provide TOEFL scores. All materials supporting applications for admission in the Fall term must be received by the preceding March first.

A limited number of Graduate Assistantships is available for the most highly qualified applicants. Assistantships involving instructional responsibilities are awarded on the basis of demonstrated scholarly potential; those identified with studio production activities are awarded to applicants possessing the greatest technical expertise. Applications for such appointments are included among the materials supporting applications for admission.

Procedures for applying for admission to graduate study at the doctoral level are similar with the added stipulation that the applicant provide evidence of completion of a master degree
program at an accredited college or university.

## Undergraduate Courses

Tc 199. Special Studies. Credit hours to be arranged. Topics to be announced. Tc 241. Fundamentals of Broadcasting. 3 credit hours. General survey of broadcasting in the United States. Factors relating to the physical bases, the origin and growth, the economics, social control, and influence of broadcasting will be considered.
Tc 242. Social Impact of Television. 3 credit hours. An exploration of the factors influencing television content and a discussion of how television content may influence behavior. Methods for the systematic criticism of entertainment, news, and documentary programming wil be stressed. Prerequisite: Tc 241.
Tc 341. Introduction to Media Aesthetics. 3 credit hours. The most important aesthetic variables that characterize television and motion pictures. These variables include area, light, color, time/motion, and sound. The systematic examination of these factors will give students a better understanding of how manipulations of the media can affect our perceptual systems.
Tc 342. Elementary Radio Workshop. 3 credit hours. Theory and practice of radio broadcasting. Prerequisite: Tc 241 and Tc 341.
Tc 343. Advanced Radio Workshop. 3 credit hours. Theory and practice of radio broadcasting. Prerequisite: Tc 342.
Tc 344. Elementary Television Workshop. 3 credit hours. Broadcast performance technique ; physical, acoustic, and mechanical theory and its application; interpretative theory and its application. Prerequisites: Tc 241 and Tc 341.
Tc 345. Advanced Television Workshop. 3 credit hours. Broadcast performance technique ; physical, acoustic, and mechanical theory and its application; interpretative theory and its application. Prerequisite: Tc 344.
Tc 347. Elementary Radio-Television Script Writing. 3 credit hours. Radio and television writing techniques ; theory and practice in the writing of all major continuity types. Prerequisite : junior standing.
Tc 348. Advanced Radio-Television Script Writing. 3 credit hours. Radio and television writing techniques ; theory and practice in the writing of all major continuity types. Prerequisites: Tc 347 or equivalent.
Tc 372. Staging and Lighting for Television. 2 credit hours. Theory and practice of identifying and controlling the visual factors in television production. The interdependence of the direction, quality, and intensity of light, the shape, surface, and composition of the objects lighted, and the camera position and lens setting is explored through group exercises and individual projects. Prerequisite: Tc 345 .
Tc 401. Research. Credit hours to be arranged.

## Tc 405. Reading and Conference. Credit

 hours to be arranged.
## Tc 406. Field Studies. 6-12 credit hours.

 An internship program for outstanding senior students who have taken all of the available courses supporting selected career objectives in public or commercial broadcasting, instructional media centers, or instructional media operations. Upon recommendation of theTelecommunication Area faculty, interested students apply for such internship as are developed through the cooperation of participating professional associations.
Tc 407. Seminar. Credit hours to be arranged.
Tc 409. Practicum. Credit hours to be arranged. Supervised laboratory work of a project nature including the preliminary study, development, and execution of major artistic or public service programs. Prerequisite: junior or senior standing. Consent of instructor is required.

## Upper-Division Courses Carrying Graduate Credit

Tc 407. Seminar. (G) Credit hours to be arranged.
Children and Television.
Film Board of Canada.
Public Broadcasting.
Cable Television and New Technology. Audience Analysis.
Comparative Systems of Broadcasting.
Design for Communication Experiments. Children and Television.
Tc 408. Workshop: Educational Television.
(G) 4 credit hours. An intensive program of class and laboratory work for teachers and administrators in the arts and skills of production and performance in the use of television in education.
Tc 410. Experimental Course. (G) Credit hours to be arranged.
Tc 431. Theory and Criticism of Television
Drama. (G) 3 credit hours. Major forms of public and commercial television drama, the appeals and techniques of each, and their contribution to popular culture and the public arts. Concepts of audience dynamics, media aesthetics, vicarious experience, escape and fantasy, and the consequence of economic dependence upon appeals to modal tastes will be analyzed and applied to selected examples.
Tc 433. Theory of Mass Communication.
(G) 3 credit hours. Emphasis on mass communication theory as the logical progression from intrapersonal and interpersonal communication theory. A critical analysis of the structure and functions of mass media considered in relationship to several theories of mass communication. Analysis of the social context within which mass communication occurs.
Tc 444. Concepts in Visual Production. (G) 3 credit hours. The study of the processes by which ideas are transformed into yisual language, through an analysis of various forms of visual representation.
Tc 445. Television Direction. (G) 3 credit hours. Theory and technique of television direction explored through group exercises and individual projects. Prerequisite : Tc 345.
Tc 446. Radio-Television Programming.
(G) 3 credit hours. Analysis of values, trends, and procedures in broadcast programming schedules; problems in planning program structure to meet community and public service needs.
Tc 448. Radio-Television and the Public. (G) 3 credit hours. Within the framework of the whole field of mass communications, this course attempts to clarify the purpose and role of broadcasting in the United States. Particular emphasis is given to analysis and disctussion of freedom, responsibility, and control as these concepts relate to the broadcaster, the government, and the public.
Tc 449. Government Regulation of Broadcasting in the United States. (G) 3 credit hours. An analysis of the laws, regulations,
and court decisions which act to regulate broadcasting in the United States. Prerequisite : Tc 241, or consent of instructor.
Tc 470. Instructional Programs for Television. (G) 4 credit hours. Intensive study of the development of the theory and practice of televised instruction. Studio exercises designed to explore effective instructional techniques based upon current theories of learning and the achievement of behavioral objectives. Two lectures and one laboratory per week.

## Graduate Courses

Tc 501. Research. Credit hours to be arranged.
Tc 503. Thesis. Credit hours to be arranged. A no-grade course.
Tc 505. Reading and Conference. Credit hours to be arranged.
Tc 507. Seminar. Credit hours to be arranged.
The following seminar topics will be offered in 1978-79.
Introduction to Graduate Studies. 3 credit hours. An exploration of the purpose and function of scholarly inquiry in the field of Telecommunication and related areas. Includes examination of historical, critical, experimental, and survey research techniques ; an introduction to scholarly writing, and opportunity to explore intellectual topics with faculty members.
Techniques and Problems of Theory Construction. 3 credit hours. A pragmatic approach to the task of theory building. The emphasis is on concept definition, theoretical and operational linkages, and theory criticism and modification. Prerequisite: Second year graduate student or consent of instructor.
Tc 510. Experimental Course. Credit hours to be arranged.
Tc 541. Theory and Criticism of Broadcasting. 3 credit hours. A review of selected theories of mass communication, linked with other critical approaches, as a background for discussion and development of ethical and artistic standards for broadcasting.
Tc 544. Radio-Television Program
Evaluation. 3 credit hours. Background and development of broadcast measurements; quantitative methods and survey procedures applicable to the testing of hypotheses in these media.

## Theater

The theater program is oriented toward the liberal art-humanistic pattern. Some specific courses are preprofessional in nature and provide a vocational level of competence in teaching, and in some aspects of commercial theater. Some students seek careers in commercial, educational, and community theaters as designers, actors, technicians, stage managers, or theater managers. Many students continue specialized training in Master of Fine Arts degree programs or nondegree professional training schools. As do other liberal arts graduates, some students use their background to pursue vocational opportunities requiring good skills in communication and in organization. A few students combine their program
with one in education and become certified teachers.
Faculty. The full-time teaching faculty in theater numbers eight including a costumer, a scene designer, a lighting designer, a technical director, and several directors with specialties in teaching acting and dramaturgy.
Theatrical Plant. There are three theater spaces in Villard Ha11. Main Stage (the Horace Robinson Theatre) has a proscenium stage which seats approximately four hundred people. The Pocket Playhouse is a small proscenium stage and seats about eighty. The Arena Theater provides a flexible open space with a capacity of about one hundred people.
Technical Facilities. The scene shop, costume, and lighting facilities are open daily. Students are encouraged to sign up for production workshop classes or to practice their craft on a volunteer basis. Students who qualify for WorkStudy Financial Aid are hired to assist in these shops. The shops are well equipped for instruction in theater skills; for example, there is a computerized lighting board for the main stage, and vacuform and welding equipment in the scene shop.
Theatre 4:30. Theatre 4:30 is a weekly gathering of students and faculty. Any student may sign up for time to produce a low-cost show. This weekly event is organized and run by an elected student board. A small budget is at their disposal. Workshops and speakers are also scheduled in response to student demand.
Theater Productions: During the year, several Main Stage productions are directed by faculty and qualified students; eight or nine budgeted studio productions which may be studentdirected are staged. Studio productions usually are scheduled in the Pocket Playhouse or the Arena Theater.
Carnival Theater. A summer stock company stages between six to eight productions during the season. Comedy, drama, musicals, and shows for children are offered almost nightly under the tent adjoining the Robinson Theater on campus. Most of the summer theater course offerings relate to this intense production program. All undergraduate company members and college level apprentices are expected to enroll in Th 408, Summer Stock Workshop (G) for 15 credit hours. Graduate student company members must enroll either in the workshop for 12 hours of credit or in a combination of theater courses with a total of 12 credit hours.

Carnival Theater High School Apprentice Program. Students 13-18 years of age are offered an intensive four weeks training program in the summer. They have classwork in performance and in aspects of technical production. The course work is supplemented with a special performance of a play and further production experience with the Carnival Company. For information, please write Dr. Marya Bednerik, University Theater Director.

The specific fields of study within the area include : acting, directing, design, costume, lighting, history, stagecraft, dramatic literature, interpretation, and theory. The courses in these fields of study are available to both majors and nonmajors.

In addition to all bachelor degree requirements of the University, the following requirements are specified for students with a major emphasis in theater : a minimum of 50 credit hours in speech courses, at least 30 of which must be upper-division courses. A minimum of 9 credit hours in speech courses outside the theater area (specifically, in film studies, rhetoric and communication and telecommunication). It is recommended that the total 9 credit hours not be concentrated in any one of the outside areas. Production Workshop: Scenery (Th 264); Production Workshop: Lighting (Th 266) ; and Costume Workshop (Th 325) ; Elements of Acting (Th 251); Movement for Actors (Th 199); Makeup (Th 252) ; Advanced Interpretation (Th 324); one advanced course in history or theory ; Play Direction (Th 364) ; Survey of Dramatic Art (Th 367, 368, 369) ; 7 credit hours of advanced work selected from upperdivision courses in acting, directing, costume, set design, lighting, or pedagogy; a minimum of 12 credit hours outside the speech department of upperdivision courses in related fields. Satisfactory completion ( C or P grade) of course work for the major is required.
Secondary-School Certification. Please see secondary school teaching of speech or dranna, page 139 of this catalog.
Grading Options. All courses in theater are available on an ungraded basis. Ungraded work counts toward fulfillment of the 186 hours requirement for graduation only if satisfactorily completed.

## Graduate Studies in Theater

The Theater Area of the Department of Speech offers graduate work in the areas of acting, directing, playwriting,
design, history and theory leading to the Master of Arts, Master of Science, Master of Fine Arts, and Doctor of Philosophy degrees. Students entering this program are assumed to have an undergraduate major in theater or the equivalent.

## Degree Requirements

The M.A. and M.S. degrees each require 45 credit hours of graduate courses. Both of these degrees require a thesis with an oral examination. The M.A. requires competence in one language.

The M.F.A. normally is a two or three-year program with a minimum of 54 credit hours required. The degree is offered in directing, acting, set design, playwriting, lighting design, and costume design. Students may not apply for admission to the M.F.A. program until they have completed 36 credit hours. The course work is usually substantially completed during the first two year ( s ). During subsequent terms, students work on their terminal artistic projects. An oral evaluation and review of the project is held following the completion of the project performance and a written report on the project which is reviewed by the candidate's report committee follows the review.

The Ph.D. degree has no minimumhour requirement. However, most students submit approximately 130 credit hours beyond the bachelor degree. One foreign language is required for the Ph.D. After candidates have completed most of their course work, they will write a comprehensive examination, followed by an oral examination. A dissertation is required, with an oral examination on the dissertation. The dissertation must be completed within three years after the student is admitted to candidacy after the comprehensive examination.

## Academic Requirements

The only course required of all graduate students is Research Methods (Th 511). But it is expected that the potential Ph.D. candidate will complete 45 to 60 credit hours beyond the master's degree in the areas of history, theory, and literature of theater. The study program of each student is planned in consultation with an adviser and an examining committee.

All candidates for graduate degrees are required to take a written or oral examination during the first term of residence. This examination is partially diagnostic in nature, and is used to determine a plan of study for the student. The Miller's Analogy Exam-
ination is required, prior to the qualifying examination.

The graduate student is expected to show ability in both the academic and production areas. Each student is expected to make a significant contribution in three areas out of the following six during residence at the University of Oregon : acting, directing, technical, management, playwriting, or teaching.

For the Ph.D. and M.A. degrees, each student is expected to have a reading knowledge of at least one foreign language to be approved by the student's advisory committee.
Proficiency level of the language is to be established by a procedure approved by the committee.

## Undergraduate Courses

Th 199. Special Studies. 1-3 credit hours. Stage Crew : Lighting, Scene, Costume. Th 199. Movement for Actors. 1 credit hour. Development of kinesthetic awareness for the actor. Movement on the stage and conventions of stage behavior. Must be taken concurrently with Th 251 Elements of Acting. See description below.
Th 229. Interpretation. 2 credit hours. The application of the principles of oral reading to literature.
Th 230, 231, 232. Survey of the Performing Arts. 3 credit hours each term. A concurrent study of the arts of dance, music, and theater, with special emphasis on the artistic contribution of the performer. Interrelations among the performing arts. The physical limitations of the forms; period and stylistic influences; temperament and personality as a factor in interpretation. Lectures and discussion ; performances by visiting artists. Not offered 1978.79.

Th 251. Elements of Acting. 3 credit hours. Elementary principles of acting techniques. Theater majors must take Th 199 Movement for Actors concurrently. Nonmajors are urged, but not required, to take Th 199 concurrently.
Th 252. Makeup. 3 credit hours. The history, purpose, and techniques of application of theatrical makeup; the use of makeup in the various theatrical media, with emphasis on stage and television performers.
Th 262. Theater Promotion Workshop. $1-3$ credit hours. Practical study in the development and application of promotion materials for hypothetical and actual theater productions.
Th 264. Production Workshop: Scenery. 2 or 3 credit hours each term. Practical experience in the construction, painting, and handling of scenery and props. Instruction in fundamentals of stagecraft and use of stage equipment. Practical experience in stage crew work. Prewitt.
Th 266. Production Workshop: Lighting. 2 or 3 credit hours. Practical experience in the use and functions of stage lighting equipment and in the operation of lights under performance conditions. Thibeau.
Th 271. Introduction to Theater Arts I. 3 credit hours. For nonmajors, as well as for theater majors. A study of theater in relation to modern social problems. Theater is viewed as a source of social, political, and cultural meaning and as a means of individual
and group expression ; major modern plays with social meaning are read and critical methods for under standing social art are explored; avant-garde and alternative theater ideas and practices are illustrated. Attending theater productions constitutes a portion of the course. Fiet.
Th 272. Introduction to Theater Arts II. 3 credit hours. Analysis of theater experiences; study of theater in other forms (film, television, religion, pageants, etc.) and of special problems affecting theater (censorship, finances, career training. etc.) Attending theater productions constitutes a portion of the course. Continuation of Th 271, although sequence may be entered in any term.
Th 273. Introduction to Theater Arts III. 3 credit hours. Behind the scenes; study and discussion of the actor, the director, the playwright, the designers, the choreographer, the business manager, etc. Opportunities to work on productions. Attending theater productions constitutes a portion of the course. May be entered in any term.
Th 324. Advanced Interpretation. 3 credit hours. Instruction in the discovery and oral expression of meaning and feeling in prose, poetry, and dramatic literature.
Th 325. Costume Workshop. 3 credit hours. Instruction in the art and craft of stage costuming ; practical experience in the design, construction, and maintenance of theatrical costumes. Mace.
Th 351. Technique of Acting: Voice. 3 credit hours. Problems in the use of voice in dramatic roles. Consent of instructor required.
Th 352. Technique of Acting: Characterization. 3 credit hours. Problems in the analysis and presentation of characters. Consent of instructor required.
Th 353. Advanced Acting. 3 credit hours. Advanced problems in acting technique : study, rehearsal, and performance. Prerequisite : Th 251, Th 351, Th 352, consent of instructor.
Th 364. Play Direction. 3 credit hours.
Sources of dramatic material, choice of plays, casting and rehearsal of players, production organization.
Th 365. Direction of Children's Theater. 3 credit hours. History and objectives of theater for the child audience; survey of existing professional and community children's theater programs; techniques of acting, directing, and producing plays for and by children.
Th 367, 368, 369. Survey of Dramatic Art. 3 credit hours each term. Development of the theater: primitive, pre-Grecian, ancient European, European Renaissance, precursory elements of the new stagecraft, Asiatic subcontinent, Asiatic mainland, Pacific island. Fiet.
Th 405. Reading and Conference. Credit hours to be arranged.

## Upper-Division Courses <br> Carrying Graduate Credit

Th 407. Seminar. (G) Credit hours to be arranged.
Theater Design and Structure.
Restoration Theater.
Theater Management.
Advanced Acting.
Creative Dramatics.
Period Costume Patterns.
Playwriting.
Th 408. Workshop. (G) Credit hours to be arranged.
Th 409. Practicum. (G) Credit hours to be arranged.

Production Projects. 1-3 credit hours. Supervised laboratory work of a project nature, including the preliminary study, development, and execution of major artistic or service activities.
Rehearsal and Performance. 1-3 credit hours. Production experience for the actor. Consent of instructor is required.
Eng 411, 412, 413. English Drama. (G) 3 credit hours each term. The development of English dramatic forms from the beginnings to Sheridan.
Th 416. Costume History. (G) 3 credit hours. Comprehensive survey of historical costume for the stage from the Egyptian period to the 20th century. Mace.
Th 417. Costume Design. (G) 3 credit hours. Basic elements of design with historical reference in relation to costume for the stage. Practical experience in costume renderings. Prerequisite: Th 416 Costume History, or consent of instructor. Mace.
Th 418. Costume Pattern Drafting. (G) 3 credit hours. Drafting and designing costumes through the flat pattern. Elements of draping, millinery, and tailoring included. Practical experience in original selected design. Prerequisite: Th 416 Costume History, and Th 417 Costume Design, or consent of instructor. Mace.
Eng 420, 421, 422. Modern Drama. (G) 3 credit hours each term. Eng 420 : growth of the modern theater in Europe from beginnings in romanticism through naturalism to symbolism and the poetic theater before 1914; Eng 421 : European and American drama between 1915-1940, the experimental theater and its effect on realism; Eng 422 : international developments in drama from 1941 to the present. Ball. Not offered 1978-79.
Th 460. Advanced Play Direction. (G) 3 credit hours. Advanced theory and practice in direction of plays for public performance. Prerequisite: Th 364, or consent of instructor Offered in alternate years.
Th 461. Introduction to Scene Design. (G) 3 credit hours. Basic principles and techniques of theatrical design for the school and community theater. Williams.
Th 463. Scenery Painting Techniques. (G) 3 credit hours. Practical experience in the painting of scenery for the stage. Painting of drops. Highlighting, shadowing, texturing, and stenciling. Forced perspective. Paints and painting equipment. Prerequisite : Th 264 or consent of instructor. Offered in alternate years. Williams.
Th 464. Properties Design and Construction. (G) 3 credit hours. Practical experience in the design and construction of stage properties and furnishings. Plastics and metals fabrication. Celastic, papier-maché, and fiberglass as properties-fabricating materials. Furniture upholstering techniques. Offered in alternate years.
Th 467. Lighting for the Stage. (G) 3 credit hours. The functions of lighting on the stage. The qualities of light, lighting. Technical and aesthetic problems. Prerequisite: Th 266, or consent of instructor. Thibeau.

## Graduate Courses

Th 501. Research. Credit hours to be arranged. A no-grade course.
Th 503. Thesis. Credit hours to be arranged. A no-grade course.
Th 505. Reading and Conference. Credit hours to be arranged.
Th 507. Seminar. Credit hours to be arranged. Romantic Theater.

Th 509. Practicum. Credit hours to be arranged. For description, see Th 409. Th 511. Research Methods. 3 credit hours. Research methodology. Examination of experimental, historical, descriptive, and developmental research methods. Style and format in scholarly presentation of research. Required course for all graduate students in theater. Fiet.
Th 520. History of the American Theater. 3 credit hours. Readings, reports, projects, and discussions concerning significant events in the theater in the United States from its beginnings to the present. Consent of instructor is required. Thibeau. Offered in alternate years. Not offered 1978-79.
Th 530. Continental Theater. 3 credit hours. Major developments and experiments in the drama and theater production of Europe, Great Britain, and Russia from Buchner to Artaud. Offered in alternate years. Th 531. Avant Garde Theater. 3 credit hours. New forms, styles, treatments of mood, and expressions of ideas and emotions as they are or may be manifest in literary, dramatic, and theatrical elements and conditions of production. Prerequisite: Th 530, or consent of instructor. Offered in alternate years. Not offered 1978-79.
Th 532. Theater of Ibsen. 3 credit hours. The modern Dano-Norwegian theater, with special emphasis on the work of Henrik Ibsen ; influence on European and American theater. DeChaine. Offered in alternate years. Not offered 1978-79.

Th 533. Theater of Strindberg. 3 credit hours. The modern Swedish theater, with special emphasis on the work of August Strindberg ; influence on European and American theater. DeChaine. Offered in alternate years: Not offered 1978-79.

Th 551, 552, 553. Theory of Dramatic Production. 3 credit hours each term. 551 : theory of acting ; 552 : theory of dramatic direction ; 553: theory of dramatic structure. Fiet.
Th 562. Styles in Scene Design. 3 credit
course. History of scene design ; historical styles and their use in the design of productions of theater classics ; 20th-century approaches to production design ; the designer's analysis of the play script. Prerequisite : Th 461. Williams.
Th 563. Advanced Problems of Scene Design. 3 credit hours. Selected problems in the design of dramatic productions. Prerequisite: Th 461, Th 562 ; consent of instructor is required. Williams.
Th 564, 565. History of the Theater. 5 credit hours each term. Components of the theater during the golden ages of dramatic art: the ancients, European Renaissance, Asiatic, 18th- and 19th-century Europeans Offered in alternate years. Fiet.
Th 568. Advanced Stage Lighting. 3 credit hours. Theories and methods of lighting stage production. Prerequisite : Th 467, or consent of instructor. Offered in alternate years. Thibeau.


# The Robert Donald Clark Honors College 

## Faculty

R. Alan Kimball, Ph.D., Director of the Honors College, Associate Professor of History. B.A., Kansas, 1961 ; M.A., 1963, Ph.D., 1967, Washington.
Steven E. Conway, M.A., Lecturer (Social Science) ; B.A., University of Portland, 1966; M.A., Oregon, 1969.
Michaela P. Grudin, Ph.D., Assistant Professor (English). B.A., Antioch, 1963 ; M.A., 1968, Ph.D., 1974, California, Berkeley. (On leave 1978-79.) Douglas Huneke, M.Div., Adjunct Instructor; B.A., Fresno State College, 1966 ; M.Div., San Francisco Theological Seminary, 1969.
Lawrence W. Owens, Ph.D., Assistant Professor, Chemistry. B.A., Seattle, 1966 ; Ph.D., Rutgers, 1973.
Stanley A. Pierson, Ph.D., Professor of History (cultural and intellectual European). B.A., Oregon, 1950 ; A.M., 1951, Ph.D., 1957, Harvard.
Linda R. Robertson, Ph.D., Visiting Assistant Professor of English. B.A., 1968, M.A., 1970, Ph.D., 1976, Oregon. Leah Stern-Zuveig, Ph.D., Visiting Assistant Professor of Philosophy. B.A., Wellesley College, 1957, M.A., 1961, Ph.D., 1971, Rochester.
Donald F. Swinehart, Ph.D., Professor of Chemistry (physical) ; B.S., Capital University, 1939 ; M.S., 1941, Ph.D., 1943, Ohio State.

The Honors College offers a four-year undergraduate program leading to the degree of Bachelor of Arts (Honors College). The college program is designed to provide an opportunity for the motivated student to explore, define, and develop intellectual capabilities not only in specialized fields but also in the liberal arts in general. The Robert Donald Clark Honors College is located in Friendly Hall; it includes private study areas, colloquium meeting rooms, a small library, the Honors College office, and a lounge where students may study or visit informally.
Admission: Application for admission to the Honors College is encouraged for those secondary school students in high standing who have demonstrated an ability to pursue creative, academic projects. A number of students lacking formal evidence of qualitative scholastic performance are annually admitted to the Honors College on the strength of interests, potential academic ability,
and professional promise. Freshmen applicants must forward to the Admissions Office the results of their college entrance examinations (SAT or ACT). The Honors College requires only the verbal and math test scores. Students who apply for admission to the Honors College must also make separate application for admission to the University. Both University and Honors College application forms may be secured from the Office of Admissions or from the Honors College. Additional information may be obtained from the Honors College office, 6 Friendly Hall. Curriculum and Requirements: The degree of Bachelor of Arts (Honors College) is conferred on students who satisfy the following requirements :
(1) Completion of Arts and Letters (HC 101, 102, 103) and History of Ideas (HC 201, 202, 203).
(2) Completion of three of the following sequences (or two if a major in a professional school) : (a) History (Hst 107, 108, 109) ; (b) Social Science (HC 204, 205, 206 ) ; (c) General Science for nonscience majors (HC $207,208,209$ ) or a sequence required for science majors ( 200 level or above) or Psychology (Psy 217, 218) and Biology (Bi 102h) ; (d) mathematics (Mth 190, 191, 192; Mth 201, 202, 203 or three terms of mathematics numbered 150 or above).
Note: The program described above is a substitute for the general University group requirements for the Bachelor of Arts degree.
(3) Proficiency in a foreign language equivalent to that reached in the secondyear college level.
(4) Two terms of Colloquium (HC 408) in the junior or senior year. Colloquia provides seminar-type instruction for students of varying backgrounds, each colloquium focusing for one term on a common topic outside the student's major field. All colloquia are offered Pass/No-Pass only.
(5) Completion of requirements in the student's major.
(6) Satisfactory completion of a senior thesis (or project) and oral examination, as determined by the student's major adviser, a departmental representative and an Honors College faculty member, if applicable.
(7) A cumulative grade point average of 3.0.

Honors College students must also satisfy all other general University requirements for the Bachelor of Arts degree. The pass-undifferentiated grading option is acceptable in the Honors College wherever it is not in
conflict with departmental major requirements.

Periodically, the Honors College also offers freshmen colloquia in which newer students are invited to investigate special topics of contemporary interest (HC 199).

In addition to the courses listed above, the Honors College curriculum offers honors sections in several other fields, including foreign languages and literature, philosophy, math, English, opportunities for work in departmental honors seminars, independent research projects, and reading and conferences. Information on these courses may be obtained in the Honors College office.

HC 101, 102, 103. Honors College Arts and Letters. 3-5 credit hours each term. An intensive study in several areas of Arts and Letters. Topics and areas of study change each term. Grudin, Owens, Robertson, Huneke, Stern-Zweig, others.
HC 201, 202, 203. Honors College History of Ideas. 3 credit hours each term. An extended evaluation of great ideas in Western literature and philosophy. Concentration on writings and concepts that have significantly changed and advanced our intellectual history. Owens, Grudin, Stern-Zweig.
Hst 107, 108, 109. Honors College History. 3 credit hours each term. An intensive examination, through documents and interpretative materials, of major phases in the development of Western Civilization. Pierson.
HC 204, 205, 206. Honors College Social
Science. 3 credit hours each term. A study of the thought, works, and methods of the social sciences. The course also examines concepts of involvement in society, questions of social action, and individual responsibility. Conway.
HC 207, 208, 209. Honors College General. Science. 3 credit hours each term. A general introduction to the sciences, their growth, and their impact on man and culture. Lectures, readings, discussion, laboratory, and field work in specific disciplines, each to be examined within a larger framework of scientific evidence and thinking. For nonmajors. Ch 204, 205, 206. General Chemistry. 3 credit hours each term. Quantitative and theoretical aspects of chemistry for students with excellent backgrounds in high school chemistry, mathematics and physics. Concurrent enrollment in Mth 201, 202, 203 recquired. Swinehart.
Mth 190, 191, 192. Mathematics for Nonmajors. 3 credit hours each term. Selected topics from mathematics specifically intended for those who will not continue the study of mathematics.
Mth 201, 202, 203. Calculus with Analytic Geometry. 4 credit hours each term. Standard sequence for students of physical, biological, and social sciences, and mathematics. Prerequisite : high school trigonometry and a high placement score ; or Mth 115 ; or Mth 102.
Mth 210, 211, 212. Seminar in the Theory of Calculus. 2 credit hours each term. A rigorous treatment of the theoretical aspects of calculus that are introduced and used in Mth 201, 202, 203. Related topics are also studied. For students with high aptitude for and interest in mathematics. Recommended
for all mathematics majors. Intended for students concurrently enrolled in a year sequence of calculus.
Psy 217, 218, 219. Introduction to Experimental Psychology (Honors College). 4 credit hours each term. A year sequence in these major areas of psychology today : experimental, physiological, clinical, and social psychology. Keele, Pien.
HC 199. Special Studies. 1-3 credit hours. Topics of current interest for lower-division students.
HC 405. Reading and Conference. Credit honors to be arranged.
HC 407. Seminar. Credit hours to be arranged.
HC 408. Colloquium. Credit hours to be arranged. Topics of current interest, usually outside the student's major field, for upperdivision students. Staff.

## Major Requirements for Honors

The major programs planned by departments and schools for students in the Honors College provide for independent study and generally allow greater flexibility in the satisfaction of course requirements than the regular undergraduate programs of the divisions. The special requirements of the several divisions for majors enrolled in the Honors College are listed below. In general, these requirements supplement those required of all regular students majoring in the department.

Anthropology: Senior honors thesis, requiring one or more terms for completion, for a maximum of 6 credit hours.

Architecture and Allied Arts: Colloquium, honors reading and conference.

Asian Studies: Senior honors thesis utilizing materials in a foreign language germane to the region with which the thesis is concerned. A maximum of 6 hours of credit for thesis is allowed. (The final oral examination will cover the thesis.)

Biology: Honors thesis based on original observations o'r experiments, for which credit may be obtained under Bi 401 ( 8 credit hours of which will satisfy major requirements for two 400 level courses). A maximum of 4 hours of credit for thesis is allowed. (Honors students may be admitted to graduate courses in the department.) Biology major requirements appear in the Department of Biology section of this catalog.

Business Administration: Major programs developed in consultation with the Undergraduate School of Business honors adviser. Ordinarily, the student writes an honors thesis during the senior year for 3-9 credit hours.

Chemistry: (1) Ch 204, 205, 206, Ch 207, 208, 209 and Mth 201, 202, 203
in the freshman year with concurrent enrollment recommended in Mth 210, 211, 213 ; (2) Ch 334, 335, 336, Ch $340,341,342$ in the sophomore year ; (3) research ( 6 credits) and honors thesis ( 3 credits) in the senior year.

Chinese and Japanese: In the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee ( 6 credit hours).

Classics: (1) Normally, in the junior year, seminar in the literature of the student's principal language ( 3 credit hours) ; (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee ( 6 credit hours).

Community Service and Public Affairs: Students in the Honors College should complete the requirements for a major in one of the divisions of the School of Community Service and Public Affairs, plus a senior thesis or another independent project. SSc 201, 202, 203, will fulfill the basis requirements in the disciplines involved.

Computer Science: CS 201, 202, 203 is the preferred starting point. Major programs are developed in consultation with the Computer Science department chairman.

Curriculum and Instruction: At least 6 credit hours of independent study (CI 405), culminating in a student project or essay on a selected research topic.

Dance: Six credits of independent study (D 409 G ) in choreography, ethnology, notation, or technical production leading to the senior honors thesis: a choreography ( 10 minutes minimum) with written description and discussion, or honors essay on a selected research topic.

Economics: Students must complete the requirements for the departmental honors program in Economics. Details are available from the department chairman.

English: A minimum of one honors seminar (Eng 407 H ) usually taken in the junior year, followed in the senior year by 6 credit hours of independent study (Eng 403) that culminates in a senior honors essay. Possible topics would include the study of a literary figure or figures, a literary period, or genre, or the completion of a creative writing project.

Geography: (1) Three from the following: Geog 481, 483, 484, 486, or 487; (2) three from the following: Geog 433, 434, 435, 436, 437, or 438; (3) three from the following: Geog 311, $312,313,314$, or 315 ; (4) two under-
graduate major seminars, Geog 407 ; (5) senior honors thesis, Geog 401.

General Humanities: At least 9 credit hours in seminar, reading and conference, thesis, or research (or a combination), leading to the preparation of senior honors thesis.

General Literature: (1) 9 additional hours in a second foreign literature read in the original, and (2) a senior essay written under the direction of a faculty adviser. Students will enroll for two terms of G Lit 403 (Thesis), the essay to be presented at the end of the second term.

General Science: A minimum of 36 pass-differentiated upper-division credit hours in approved sciences with an average grade of B or higher, including a minimum of 12 hours in each of two sciences which may be used in satisfaction of degree requirements for departmental majors in those sciences. A senior comprehensive examination covering the two sciences is required.

Geology: (1) Complete the Department of Geology mathematics and science requirements in either curricular options. (2) Geol 201, 202, 203, 325, 326,327 . (3) Choice of four from Geol 391, 392, 414, 415, 416, 417, 423, 431, 432, 461, 463, 470. (4) Honors thesis (up to 4 credit hours) or Field Geology (Geol 406).

German and Russian: In the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee, for 3 credit hours.

History: Complete requirements for a major in history, including (1) senior honors thesis, 7 credit hours; and (2) an oral examination on the thesis and related work.

Journalism: (1) J 485, J 487 ; (2) senior thesis (J 403), 6 credit hours; (3) examination before faculty committee on thesis and professional course work.

Linguistics: Senior honors thesis based on original research. A maximum of 6 credit hours for thesis may be obtained under Ling 401.

Mathematics: (1) Completion of two of the following four sequences: Mth 413, 414 (or Mth 415, 416) ; Mth 431, 432 ; Mth $437,438,439$; Mth 447,448, 449 , with an average grade of B or higher; (2) a thesis ordinarily written in the senior year, covering advanced topics assigned by the student's adviser.

Medicine: (1) Three years of work in the Honors College, including the premedical program outlined on page 190 of this catalog or equivalent; and completion of the first-year professional
program in medicine with a scholastic rank in the upper half of the class. (2) Four years of work in the Honors College, including the premedical program outlined on page 164 of this catalog, and fulfillment of major requirements in general science, biology, or other major witl approval of the premedical adviser.

Music: (1) 9 credit hours of independent study of a musical period, style, genre or composer ; (2) honors essay in spring term of senior year.

Philosophy: (1) Senior honors essay, following intensive study of some aspect of philosophy either in connection with a senior seminar or, when recommended, on a tutorial basis, with 9 credit hours.

Physics: In addition to regular requirements for students preparing for graduate work in physics (see Physics section), independent research and a thesis are required.

Political Science: (1) Complete requirements for political science major (see departmental requirements). Students are strongly advised to take PS 100 or PS 207, (2) honors thesis during senior year (maximum credit, 9 hours) to include PS 405 ( 3 hours) and PS 403 ( 6 hours). All 9 credit hours are to be prearranged with the thesis adviser. (The 9 credit hours of work on the thesis will count toward the total departmental requirement for graduation.)

Psychology: (1) Complete requirements for a major in psychology ; (2) honors thesis; (3) complete advanced Experimental Psychology sequence (Psy 430, 431, 432). Recommended : Mth 425, 426, or Mth 441, 442, 443.

Religious Studies: Complete requirements for a major in Religious Studies, including (1) a B-plus average in religion courses, (2) senior honors thesis for 3 credit hours.

Romance Languages: In the senior year, an honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee ( 2 credit hours per term RL 403).

## Sociology: (1) Soc 327, Soc 370,

 Soc 371 ; (2) honors thesis involving sociological analysis (maximum credit, 9 hours). The thesis examination includes examination of the candidate's knowledge of the relevant related literature.Speech: (1) Honors seminar during junior year; (2) honors readings, fall term of senior year ; (3) honors thesis, prepared during winter and spring terms of senior year ( 6 credit hours).

## Independent Study

In addition to its regular program, the Robert Donald Clark Honors College administers a program of undergraduate independent study leading to the degree of Bachelor of Arts (Honors College). Students enrolled in this program are desiguated Independent Scholars. Total enrollment of Independent Scholars is at present limited to twenty students.

A student is admitted to the status of Independent Scholar with the approval of the Honors College Independent Study Committee, the Director of the Honors College, and the head of an academic department or the dean of a professional school. Approval is based solely on evidence of creative or scholarly originality and the ability to work independently toward a creative or scholarly goal. Such evidence is not limited to academic records or grades.

An Independent Scholar is exempt from all requirements of courses, credits, and grades. The student plans a program of studies in cooperation with a committee of three members of the faculty appointed by the director of the Honors College, and pursues studies under the supervision of this committee. The scholar remains in good standing as long as the committee chairman reports, at the end of each term, that the student is making satisfactory progress toward a personal goal. If a student changes status from that of an Independent Scholar to that of a regular University student, the committee will recommend a transfer of credits to the academic record equivalent to the work completed satisfactorily as an Independent Scholar. A student who wishes to change from independent status to regular status must submit a petition to the Academic Requirements Committee to obtain credit for work completed in Independent Study (HC 402).

An Independent Scholar pays the customary tuition for full-time or parttime students. Scholars may attend any University course without formal registration, provided the consent of the instructor is obtained. If the course work is to be recorded with grade and credit, the student must register for the course and satisfy normal course requirements.

Upon the satisfactory completion of the program, an Independent Scholar is granted the B.A. (Honors College) degree with the recommendation of the Director of the Honors College and the head of an academic department or the dean of a professional school, and the student's advisory committee. The
recommendation is based on the following criteria :
(1) Completion of work equivalent to twelve terms of study toward the scholar's goal, either in a regular curriculum or as an Independent Scholar under the supervision of a committee. (2) Evidence of accomplishment in the form of creative or scholarly productions in the sciences, humanities, or arts. (3) An examination to determine the student's general scholarly competence and accomplishment in fields relevant to the area of interest. The examiners include the chairman and members of the scholar's study committee and a faculty representative from the Honors College.

Although not restricted to any specific courses or topics, all programs of independent study maintain the spirit of a broadly based liberal arts education which characaterizes the Honors College.

# Special Programs and <br> Services in the College of Arts and Sciences 

Academic Advising

The Office of Academic Advising provides information on the general University graduation requirements, and assists students in choosing major programs of study. The office also coordinates the advising program for students who have not declared a major, by assisting undeclared students through a program of premajor advising. When an undeclared student chooses a major, the student is referred to the appropriate department or school.

The Office of Academic Advising coordinates all the advising for new students. The office conducts workshops to acquaint faculty members with the advising system and with the academic requirements and regulations. Faculty members are encouraged to make the new student's first encounter with the University's academic community a pleasant and informative experience. Students may prepare for their advising sessions in advance by attending workshops conducted by Academic Advising, or by reading Of Course, an annual publication of Academic Advising, and by studying the current General Catalog.

The Office of Academic Advising also houses several special programs. These are Prehealth Sciences, General Science, Credit-by-Examination, Project Ahead, Academic Planning Resource Area, and General Social Science; advising continues for students who enrolled in this program prior to Spring 1974. The Office of Academic Advising is in 107 Friendly Hall (telephone 686-3045).

## Use of the Library

The University Library offers the following service course for the convenience of undergraduates.
Lib 127. Use of the Library. 3 credit hours. Initial training in the use of library materials and services and in elements of bibliographic form. Designed to help undergraduate students use the library more effectively. Durnell.

## Center for Self-Development

Jacqueline Bonner, M.S., Director.
The Center for Self-Development assists students to develop their educational skills and enhance their prospects for educational and personal success. It provides, in small groups and on an
individual basis, instruction in the areas of reading, writing, research methods, use of library resources, speaking and listening, examination skills, critical thinking, study methods, and mathematics.

Tutorial assistance to aid students with courses taught through academic departments is made available. Students from culturally different or low-income backgrounds may receive counseling and advocacy assistance through the Center. The nonacademic but critically important factors contributing to a student's successful overall experience at the University are recognized and addressed. The Center for SelfDevelopment is located in Room 207 Emerald Hall (telephone 686-3232).

## Learning Resources Center

Nancy S. Ames, M.S., Acting Director. Susan Lesyk, M.A., Instructor.
The Learning Resources Center provides assistance to students who want to develop their learning efficiency and skills. Noncredit classes and tutoring are designed to teach study skills and time-management techniques, improve reading and writing, and build testtaking proficiences.

The Center trains tutors in collegelevel teaching methods and provides a base of college instructional experience for future college instructors and graduate teaching fellows. Special tutor training is available to teach writing tutors and tutors in English as a Second Language.

The Center offers a Speed Reading course, using the student's own textbooks, to raise reading rate, improve comprehension, and increase retention of learned material. Other classes include Vocabulary Development, Exam and Study Skills, Personal Efficiency and Time Management, Term-Paper Writing, LSAT and GRE preparation, and Spelling. A minimal fee is charged for services. The Center is located in 268 Condon Hall (telephone 686-3226).

## Upward Bound

Pearl M. Hill, M.S., Director. B.S., 1971, M.S., 1973, Oregon.
Upward Bound is a pre-college program designed to generate skills and motivation to successfully complete high school and gain admission to a postsecondary educational program. High school students from low-income families, who have academic potential
but have inadequate secondary school preparation, are eligible to become participants of the program. These students are recruited from various geographic locations known as target areas within Oregon which are determined by federal grant regulations.

The Upward Bound student is involved in an eight-week summer residential program during which participants live on the University of Oregon campus. They attend classes that emphasize basic skill development which provides them with a variety of pre-college academic experiences. During the summer, Upward Bound students are also involved in career and personal counseling for the purpose of encouraging creative thinking and the development of a positive attitude toward learning.

During the school year, students are provided with tutoring and counseling services in their home and high-school environment.

## Environmental Studies Center

The Environmental Studies Center maintains a library of books, periodicals, and other materials on environmental issues as a resource for students and the general community. The Center publishes an annual catalog of environment-related courses of instruction and programs offered on campus, and sponsors special courses, speakers, films and symposia. Copies of the environmental course catalog are available upon request.
At present, there is no formal program in environmental studies at this University, but students may initiate independent projects for credit with the assistance of the Center. Undergraduate students may develop individual Independent Study programs in Environmental Studies through the Wallace School of Community Service and Public Affairs or through the Honors College. Graduate students may obtain master's degrees in Environmental Studies through the Interdisciplinary Master's Program of the Graduate School. Copies of Independent Study guidelines from the Honors College and CSPA and of Interdisciplinary Master's Program guidelines from the Graduate School are available from the Environmental Studies Center upon request.

The Environmental Studies Center is located in Room 11, Prince Lucien Campbell Hall (telephone 686-5006). Staffing is provided by volunteers from the campus and community and by work-study students.

## Museum of Natural History

The Museum of Natural History is devoted to the promotion of the several disciplines of natural history through the furtherance of public understanding. In the display section of the Museum of Natural History building, located in the Science complex immediately south of Franklin Boulevard, are shown small but representative portions of the extensive and significant collections of the related University museums: the Condon Museum of Geology, the Museum of Zoology, the Oregon State Museum of Anthropology, and the University Herbarium. In the recent past, this public display area has been visited by about twenty thousand people yearly; plans are now being developed for its expansion, whichwhen realized--will undoubtedly attract many more. The related museums promote research in Archaeology, Botany, Geology, and Paleontology.

Oregon State Museum of Anthropology
Don E. Dumond, Ph.D., Director. B.A., New Mexico, 1949; M.A., Mexico City College, 1957; Ph.D., Oregon, 1962. David L. Cole, M.S., Curator. B.S., 1952; M.S., 1954, Oregon.
Established by the Oregon Legislature in 1935 to serve as custodian of archaeological and anthropological material in the possession of the state of Oregon, the Oregon State Museum of Anthropology also sponsors research in its field. Its facilities for fieldwork in archaeology are especially complete. Portions of its collections are displayed through the Museum of Natural History.

## Art History

The University offers a comprehensive program of studies in the history of art through the Department of Art History in the School of Architecture and Allied Arts. All courses in the department are open to nonmajors. Information about the Department of Art History begins on page 186.

[^1]Michael B. Fish, Ph.D., Assistant Professor of Chinese.
Jane Hsu, M.L.S., Bibliographer, Library.
Esther Jacobson-Leong, Ph.D., Associate Professor of Art History.
Angela J. Jung, Ph.D., Professor of Chinese.
Hee-jin Kim, Ph.D., Associate Professor of Religious Studies.
Stephen W. Kohl, Ph.D., Assistant Professor of Japanese.
Judith Merkle, Ph.D., Assistant Professor of Political Science.
Robert Murase, B.L.A., Assistant Professor of Landscape Architecture. Kate Nakai, Ph.D., Assistant Professor of History.
Yoshiyuki Nakai, Ph.D., Assistant Professor of Japanese.
Parkes Riley, Ph.D., Assistant Professor of Political Science.
Robert Smith, Ph.D., Professor of Economics.
Theodore Stern, Ph.D., Professor of Anthropology.
Thomas Thompson, Ph.D., Assistant Professor of Political Science.
Ryoko Toyama, M.L.S., Bibliographer, Library.
Rosalie Tung, Ph.D., Assistant Professor of Management.
Lucia Yang, Ph.D., Assistant Professor of Chinese.

## Undergraduate Studies

The University offers an interdisciplinary program in Asian Studies leading to the Bachelor of Arts degree. The curriculum includes courses in anthropology, art history, Chinese language and literature, economics, geography, history, Japanese language and literature, political science, and religious studies. The program is administered by the Asian Studies Committee composed of faculty with Asian specializations and student representatives.
The student majoring in Asian Studies is required to complete two years ( 30 credit hours) of either the Chinese or Japanese language. (Under special circumstances, he or she may demonstrate an equivalent competence by examination or by work in advanced language courses.) In addition, he or she must complete 36 credit hours of course work distributed as set forth below. Each student's course distribution should significantly cover more than one Asian civilization : thus a student focusing on Japan should take at least nine credit hours dealing, for example, with China. Students intending to pursue graduate work in Asian

Studies are advised to complete requirements for a B.A. in one of the disciplines represented in the Asian Studies curriculum, as well as fulfilling the requirements for Asian Studies.

The 36 credit hours of Asian Studies work should be chosen as indicated below. (The order does not reflect the sequence in which courses need be taken.) Students are encouraged to consult with their adviser in planning their course of study. One D grade is considered serious warning, and more than one is not acceptable for credit.
(1) Nine credit hours from one of the major history sequences: The Far East in Modern Times (Hst 391, 392, 393) ; History of China (Hst 494, 495, 496) ; History of Japan (Hst 497, 498, 499).
(2) Eighteen credit hours from among the following : Peoples of Southern and Eastern Asia (Anth 438, 439, 440) ; History of Oriental Art (ArH 207, 208, 209) ; Geography of Asia (Geog 203) ; Introduction to Japanese Literature (Jpn 301, 302, 303) ; Introduction to Chinese Literature (Chn 307, 308, 309) ; Southern Asia in Modern Times (PS 337, 338) ; Government and Politics of the Far East: China (PS 460, 461) ; Religions of Mankind (R 302).
(3) Nine additional hours from any of the courses in (1) or (2) above, or from the following courses:

Anthropology: Peoples of Southern and Eastern Asia (Anth 438, 439, 440).

Architecture: Seminar: Japanese Architecture (A rch 407).

Art History: Japanese Art (ArH 467, 468, 469) ; Chinese Art (ArH 464, 465, 466) ; Seminar : Early Chinese Painting (ArH 407) ; Seminar: Ming Painting (ArH 407) ; Seminar: Ch'ing Painting (ArH 407); Seminar : Indian Art (ArH 407) ; Seminar: Himalayan Art (ArH 407) ; Seminar: Eurasian Bronze Early Iron Age Art ( ArH 407 ).
Economics: Structure of the Japanese Economy (Ec 407).
History: Foundations of East Asian Civilization (Hst 290) ; China Past and Present (Hst 291) ; Japan Past and Present (Hst 292) ; Seminar: China (Hst 407) ; Seminar: Modern Sino-Japanese Relations (Hst 407); Colloquium : China (Hst 408) ; Colloquium: Japan (Hst 408) ; Thought and Society in East Asia (Hst 491, 492).

Chinese: Contemporary Chinese (Chn 414, 415, 416) ; Chinese Composition and Conversation (Chn 330, 331, 332) ; Literary Chinese (Chn 436, 437, 438) ; Advanced Readings in Modern Chinese Literature (Chn 420, 421, 422) ; T'ang Poetry (Chn 423, 424,

425 ) ; Chinese Bibliography (Chn
453) ; History of the Chinese Language (Chn 440) ; Applied Chinese Phonetics (Chn 441) ; Chinese Morphology and Syntax (Chn 442) ; Semantic Structure of Chinese (Chn 443) ; Chinese Dialects (Chn 445) ; The Chinese Classics (Chn 461) ; Twentieth-Century Chinese Literature (Chn 462).

Japanese: Contemporary Japanese (Jpn 411, 412, 413) ; Japanese Composition and Conversation (Jpn 327, 328, 329) ; Literary Japanese (Jpn 426, 427, 428) ; Advanced Readings in Modern Japanese Literature (Jpn 417, 418, 419) ; Japanese Poetry (Jpn 433, 434, 435) ; Japanese Bibliography
(Jpn 450).
Political Science: Government and Politics of the Far East: China (PS 460, 461) ; Seminar: Asian Political Thought (PS 407).

Religious Studies: Varieties of Eastern Meditation (R 230); Religions of India (R 301) ; Chinese Religions (R 303) ; Buddhism and Asian Culture (R330, 331).
Honors: See Honors College.

## Graduate Studies

The University offers an interdisciplinary program in Asian Studies leading to the Master of Arts degree. The curriculum includes courses in anthropology, art history, Chinese language and literature, economics, geography, history, Japanese language and literature, political science, and religious studies. The program is administered by the Asian Studies Committee, composed of faculty with Asian specializations and student representatives.
There are no specific requirements for admission to the program beyond having a baccalaureate degree in a specific departmental discipline. It is preferred, however, that applicants have some undergraduate preparation in courses relating to Asia. Students lacking adequate Asian language or disciplinary training will be required to pursue appropriate courses without graduate credit. Prior to registration, the Asian Studies committee will assign each student an adviser who will assist the student in developing an appropriate individual program.
Students may fulfill their degree requirements by electing either (1) a program without thesis, or (2) a program with thesis. Students electing option (1) must complete 54 credit hours of graduate study, including 45 hours in Asia-related courses, and must submit two substantial research papers on Asian topics developed in seminars or colloquia, and pass a general Asian Studies field examination. Students
electing option (2) must complete 48 credit hours of graduate study, including 45 hours in Asia-related courses, of which 9 hours are earned for thesis. All courses used for fulfillment of the 45-hour requirement in Asia-related courses must be approved by the student's adviser, in consultation with the committee. A D grade is not acceptable for credit in the graduate program. These courses must represent at least two major Asian cultures and three academic areas, and include three seminars or colloquia, of which one must be the Asian Studies Interdisciplinary Seminar offered once annually. An M.A. candidate is required to demonstrate competence in Chinese or Japanese equivalent to two years of college training.

Students enrolled in graduate programs of disciplinary departments may earn a second master's degree in Asian Studies. Besides satisfying the degree requirements set by their departments, such students must complete 30 credit hours of graduate credit in approved Asia-related courses, including the Interdisciplinary Seminar, and must demonstrate language competence in Chinese or Japanese equivalent to two years of college training. A thesis, applying the methodology of the student's discipline to an Asian subject, is required. The requirements for both the Asian Studies and disciplinary degrees must be completed simultaneously. A student completing this option is granted two Master of Arts degrees, one in Asian Studies and one in the departmental field.

Below are listed courses currently approved for inclusion in the Asian Studies curriculum. (The student should recognize that not all of these courses will be offered in any given year.) In addition, the Asian Studies Committee, at the request of the student and upon the recommendation of the student's adviser, may approve other courses which offer the opportunity to apply a disciplinary methodology to Asian topics. For a description of the listed courses, please see the appropriate departmental listing.

Anthropology: Peoples of Southern and Eastern Asia (Anth 438, 439, 440). Architecture: Special Studies: Japanese Architecture (Arch 501).

Art History: Chinese Art (ArH 464, 465, 466) ; Japanese Art (ArH 467, 468, 469) ; Seminar : Chinese Art (ArH 507) ; Seminar: Early Chinese Painting (ArH 507) ; Seminar: Ming Painting (ArH 507) ; Seminar: Ch'ing Painting (ArH 507) ; Seminar: Japanese Art (ArH 507) ; Seminar: Indian Art (ArH 507) ; Seminar: Himalayan

Art (ArH 507) ; Seminar: Eurasian Bronze Age Art (ArH 507).

Chinese: Reading and Conference (Chn 405) ; Seminar (Chn 407); Contemporary Chinese (Chn 414, 415, 416) ; Advanced Readings in Modern Chinese Literature (Chn 420, 421, 422) ; T'ang Poetry (Chn 423, 424, 425) ; Chinese Morphology and Syntax (Chn 442) ; Semantic Structure of Chinese (Chn 443) ; The Chinese Classics (Chn 461) ; Twentieth Century Chinese Literature (Chn 462); Literary Chinese (Chn 436, 437, 438; Chinese Bibliography (Chn 453) ; History of the Chinese Language (Chn $440)$; Applied Chinese Phonetics (Chn 441) ; Chinese Dialects (Chn 445).

Economics: Structure of the Japanese Economy (Ec 407).

History: Thought and Society in East Asia (Hst 491, 492) ; History of China (Hst 494, 495, 496) ; History of Japan (Hst 497, 498, 499) ; Seminar: China (Hst 507) ; Seminar : Japan (Hst 507) ; Seminar: Modern Sino-Japanese Relations (Hst 507) ; Seminar: East Asian Historiography (Hst 507) ; Colloquium : Imperialism in China (Hst 508) ; Colloquium: Feudalism in East Asia (Hst 508).

Interdisciplinary Studies: Asian Studies: Interdisciplinary Seminar (ISt 507).
Japanese: Reading and Conference (Jpn 405) ; Seminar: Japanese Literature (Jpn 407) ; Contemporary Japanese (Jpn 411, 412, 413) ; Advanced Readings in Modern Japanese Literature (Jpn 417, 418, 419) ; Literary Japanese (Jpn 426, 427, 428) ; Japanese Poetry (Jpn 433, 434, 435) ; Japanese Bibliography (Jpn 450).
Political Science: Government and Politics of the Far East: China (PS 460, 461) ; Sino-Soviet Relations (PS 507) ; Seminar: Comparative Communist Systems (PS 507) ; Seminar: Comparative Labor Movements (PS 507).

Religious Studies: Zen Buddhism (R 430 ) ; Reading in Zen Classics (R 431).

## Classical Archaeology

With the existing curricular resources of the University, it is possible to arrange an undergraduate program which gives a sound preparation for graduate study and an eventual career in Greek and Roman archaeology. A student would most profitably satisfy the major in one of the three departments contributing to the program, with the addition of courses
selected from the other two departments. The following are the three programs recommended for a specialization in Classical Archaeology.

Art History: departmental major, with a concentration in Greek and Roman art, to include Ancient Mediterranean Art (ArH 411, 412, 413), Greek and Roman Art (ArH 414, 415, 416), and Seminar in Greek and Roman Art (ArH 507). Courses recommended in addition to the major: History of Greece and Rome (Hst 411, 412, 413), Seminar in Greek or Roman history (Hst 407 or 507), two years of Greek or Latin. Adviser, Frances Stern, Ph.D., Assistant Professor of Art History.

Classics: departmental major, consisting of twenty-four hours of Latin or Greek beyond the second year. History of Greece and Rome (Hst 411, 412, 413). Courses recommended in addition to the major: Seminar in Greek or Roman History (Hst 407 or 507). Ancient Mediterranean Art (ArH 411, 412, 413) or Greek and Roman Art (ArH 414, 415, 416), Seminar in Greek or Roman Art (ArH 507). Adviser, C. Bennett Pascal, Ph.D., Professor of Classics.

History: departmental major, with a concentration in the history of Greece and Rome, to include History of Greece and Rome (Hst 411, 412, 413) and a Seminar in Greek or Roman History (Hst 407 or 507 ). Courses recommended in addition to the major: Ancient Mediterranean Art (ArH 411, 412, 413) or Greek and Roman Art (ArH 414, 415, 416), Seminar in Greek or Roman Art (ArH 507), two years of Greek or Latin. Adviser, Jerzy Linderski, Ph.D., Professor of History.

Students who plan to pursue a career in Classical Archaeology are reminded that most graduate departments require a familiarity with both Classical languages and a reading knowledge of French and German.

Graduate Study: The Department of Classics offers an interdisciplinary Master of Arts degree to accommodate students who contemplate advanced study or careers in Classical
Archaeology.

## Classical Civilization

The University offers a general program of study of the arts and institutions of ancient Greece and Rome for students who want a broad classical education with a minimum of language study. The requirements for the degree of Bachelor of Arts with an area of
emphasis in classical civilization are listed in the Department of Classics.

Graduate Study. The Department of Classics administers an interdisciplinary Master of Arts degree in Classical Civilization, to provide predoctoral training for prospective candidates in Classical Archaeology and Ancient History, or for students interested in a general program in ancient studies at the graduate level. Consult a departmental adviser for a description of the program.

## Comparative Literature

Perry J. Pouvers, Ph.D., Professor of Romance Languages, Director. Irving Wohlfarth, Ph.D., Associate Professor of Comparative Literature (19th-century French literature, contemporary European criticism, sociology of literature). B.A., Cambridge, 1961 ; Ph.D., Yale, 1970.
The University offers a program of graduate study in the field of comparative literature, leading to the Master of Arts and Doctor of Philosophy degrees. The program is administered by an interdisciplinary committee including faculty members from the departments of English, German and Russian, and Romance Languages.

For admission to the program, a candidate should normally have an undergraduate major in one literature plus competence in two foreign languages chosen from the following list: French, German, Greek, Italian, Latin, Russian, Spanish.

Master of Arts degree: The candidate must demonstrate competence in two languages, in addition to English, by completing literature courses in the languages. The student's course program must include Introduction to Comparative Literature (C Lit 514) and at least one additional course in comparative literature. For the M.A. degree, candidates take field examinations covering two periods in at least two literatures; the examination requirement in one field may be satisfied by completing four graduate courses, covering two or more literatures.

Doctor of Philosophy degree: In addition to the above requirements, doctoral candidates must take at least two more courses or seminars in comparative literature and take field examinations covering two more periods in at least two literatures. Of the four field examinations for the doctorate, two may be satisfied by completing four graduate courses in two or more literatures.

After completing all the above requirements, the candidate will submit a prospectus of a doctoral dissertation on a comparative topic. The dissertation should be completed within three years of advancement to candidacy and expounded in a final oral presentation.
C Lit 407. Seminar. (G) 3 credit hours.
Recent topics have been:
The Renaissance Hero.
Comedy of Classicism.
Romantic Drama.
Don Juan, Faust Themes.
Relations Between Literature and Art. The Anti-hero.
Avant-garde Literature.
The Literature of Existentialism.
C Lit 501. Research. Credit hours to be arranged.
C Lit 503. Thesis. Credit hours to be arranged.
C Lit 505. Reading and Conference. Credit hours to be arranged.
C Lit 507. Seminar. 5 credit hours. Recent topics have been:
Medieval Poetry.
Renaissance Drama.
Classicism and Enlightenment.
Studies in Romanticism.
Realism and Naturalism.
The Symbolist Movement.
The Modern Novel.
Twentieth-Century Experiments in Literary Forms.
Studies in the Sociology of Literature. Colloquium on Literary Theory.
C Lit 514, 515, 516. Introduction to Comparative Literature. 4 credit hours each
term. History, theory, and practice of the study of comparative literature. Ball, Hart, Wohlfarth.

## Ethnic Studies

Madronna Holden, Ph.D., Assistant Professor of Anthropology, Coordinator.
The Ethnic Studies Program is designed to broaden the education of all students about the various ethnic and cultural strains in American society. The program is interdisciplinary, drawing from many areas of study a vailable on campus : anthropology, art, community services, English, economics, geography, history, music, sociology, political science, psychology, and others.

The program offers students practice in using academic tools and resources to focus on concrete social issues of concern to ethnic communities.

The requirements for a certificate in Ethnic Studies may be fulfilled by: (a) satsfactory completion of 21 credit hours in upper-division courses, and 15 credit hours of lower-division courses, or, (b) 21 credit hours of upper-division courses which includes 6 hours of practicum in field experience and 9 hours of lower-division courses in Ethnic Studies. Students seeking a certificate should consult the director
well in advance of graduation for transcript evaluation or to arrange the practicum. Students must complete a major and degree requirements in another department or school of the University.

## Lozer-division requirements

 (9-12 credit hours):
## ES 101. Ethnic Groups in American

 Society. 3 credit hours. Surveys the history and traditions of minority groups (both nonwhite and white) in the United States, focusing on the firsthand voices (largely autobiography, oral history, folklore) of minority community members. The course will integrate resources from a number of Arts and Sciences disciplines, as well as using speakers from the local community and elsewhere who are in touch with ethnic minority experiences and problems.ES 102. Ethnic Groups and Contemporary America. 3 credit hours. Continuation of ES 101.
ES 103. Ethnic Groups and the American Experience. 3 credit hours. An investigation of the impact of contemporary American society on Asian Americans, Chicanos, Blacks, and Native Americans, and of current trends of political and social events which shape our society. Particular focus is on cultural pluralism and forces operating with contemporary America.
ES 199. Special Studies. 1-3 credit hours.

## Upper-division community topics courses ( $9-15$ credit hours):

## ES 310. Scandinavian Minorities in

America. 3 credit hours. A multi-media examination of the socio-economic and cultural heritage of the Scandinavian peoples in the United States, their history of immigration and settlement, and their contributions to the contemporary American society.
ES 315. Introduction to the Asian-American Experience. 3 credit hours. An introduction to the histories of Asian-American groups in the United States; in particular, Chinese, Filipino, Japanese, and KoreanAmerican ethnic groups.

## ES 320. Problems and Issues in the Native

 American Community. 3 credit hours. A broad perspective on the position of various Native American tribal groups in contemporary American society. Historical perspective of the cultural conflict between Native American and white-frontier world views: economic and political goals for territorial United States that led to unfavorable policies. The present legal status of native people, treaty rights, and the Bureau of Indian Affairs; the philosophy and effects of termination, economic, and health conditions on reservations, tribal traditions, and unity ; diversity, and factionalism among native peoples.ES 410. Issues and Concerns of Minority Women. 3 credit hours. Study and discussion of political, social, and cultural concerns of Asian-American, Black-American, Mexi-can-American, and Native American women in the United States. Readings, guest speakers, films, and media productions facilitate discussions and propose solutions to both the unique and the shared problems of minority women today.
Eng 310. Black Prose. 3 credit hours.
Eng 311. Black Poetry. 3 credit hours.
Eng 407. Major Black Writers. (G) 3 credit hours.

Hst 221, 222, 223. Afro-American History. 3 credit hours each term.
RL 410. Chicano Language and Culture. 3 credit hours.
RL 410. Bilingualism. 3 credit hours.
RL 410. Spanish Dialects in the United States. (G) 3 credit hours.

Upper-division requirements and interdisciplinary studies ( $6-15$ credit hours):
ES 405. Reading and Conference. Credit hours to be arranged.
ES 407. Seminar. Credit hours to be arranged.
ES 409. Practicum. Credit hours to be arranged. Required for Ethnic Studies Certificate.
ES 410. Experimental Course. Topics and credit hours to be arranged.

Upper-division courses with related subject matter in other departments will be included in individual Ethnic Studies certificate programs with the consultation of the director.

## General Humanities

Robert Grudin, Pl.D., Department of English, Chairman, General Humanities Committee.
Stoddard Malarkey, Ph.D., Department of English, Chief adviser.
General Humanities is an interdisciplinary program built around a core of history, philosophy, and literature and leading to the degree of Bachelor of Arts. Its aim is to provide students with a knowledge of the ideas and institutions which form the basis of our culture. Students will also be required to familiarize themselves with a particular topic in the humanities: a given period, geographical area or important theme, chosen by the student with his or her adviser. The program is designed to give adequate preparation for graduate work in literature, law, government, religion, or the social sciences. It is also designed to aid students in developing an informed and intelligent response to problems in modern society.

## The General Humanities Major

Lower-Division Requirements: G Hum 199. Introduction to Humanities. 3 terms, 3 credit hours each term. Satisfaction of the University language requirements for the Bachelor of Arts degree.
History 101, 102, and 103 (History of Western Civilization).
English 204, 205, and 206 (Survey of English Literature).
Nine credit hours in the history of art or in the history of music or both.

Upper-Division Requirements:
Nine credit hours of history relating to the field of concentration.
Classics 301, 302, and 303 (Literature of the Ancient World).
Philosophy 301, 302, and 303 (History of Ancient Philosophy).
or
Philosophy 304, 305, and 306 (History of Modern Philosophy).
Nine credit hours of General Humanities courses at the 400 level.
Twelve additional credit hours of courses (in any area) relating to the field of concentration.

## G Hum 199. Special Studies. 1-3 credit

 hours.G Hum 101, 102, 103. Introduction to the Humanities. 3 credit hours each term. A chronological survey of the ideas and modes of vision which form the basis of our culture. Readings and discussions will include philosophy, science, history, religion, literature, and the arts. This three-term course is required for majors in general humanities, and is available to interested nonmajors.
G Hum 131. Ascent of Humanity. 3 credit hours. Built around J. Bronowski's series of television programs "The Ascent of Man," and on his book of the same title, this course will examine human beings' developing understanding of their own universe. Lectures, discussions, and weekly television tapes.
G Hum 403. Thesis. Credit hours to be arranged.
G Hum 405. Reading and Conference. Credit hours to be arranged.
G Hum 407. Seminar. (g) The following seminar topic is offered with credit hours as noted; may be taken for minor graduate credit. All readings will be in English translation.
Literature and the Arts in Renaissance Florence. 3 credit hours spring term.
Hatzantonis. Florence is considered not only the source of Renaissance learning but the first home of the "Renaissance Man"-the man who could express himself equally well in any of several disciplines. This course will examine the many-faceted work of such archetypical figures as Leon Battista Alberti, Leonardo Da Vinci, Michelangelo, and Benvenuto Cellini.
G Hum 410. Experimental Course. (g) The following experimental courses are offered with credit hours as noted. All may be taken for minor graduate credit. All readings will be in English translation.

## Music in World Cultures. 3 credit hours

fall term. Trotter. A survey of music as a cultural phenomenon. This nontechnical course will provide an introduction to the study of world music and an understanding of the origins and uses of music in society. We will focus on the musical experience not only in Europe and America but also in Africa and the Orient.
Romanticism and Social Science. 3 credit hours fall term. Ryan. This course will study the relationship of the romantic movement to the social sciences : the romantic critique of political economv, sociology, and politics; and the romantic's own conception of society. The approach will be historical, focusing on the 19 th century. The romantic critique of bourgeois social science will be compared and
contrasted with that of Marx. Readings will include: Burke, Wordsworth, Coleridge, Carlyle, Ruskin, and Marx.
Western Images of East Asia. 3 credit hours winter term. Nakai. An examination of the changing images of China and Japan prevalent in the Went from the time of Marco Polo to the present. Readings will be drawn from the variety of works which have influenced Western perceptions of Asia, from the writings of Marco Polo and the accounts of pre-twentieth-century missionaries and diplomats to novels and journalistic accounts of more recent decades.
Music, Words, and Meaning. 3 credit hours winter term. Trotter. Songs and musical theater as interplay of music and words. We will become acquainted with musical settings of poetry and prose, both as examples of particular stylistic approaches and as evocations of a particular cultural context.
Sport and Society. 3 credit hours. Santomier, Brockhoff. Examines the function of athletics in contemporary society from philosophical, cultural, and socio-economic perspectives.
Humanism and the Renaissance Hero. 3 credit hours. Grudin. Ideas of heroic virtue as propounded by Renaissance humanists and developed by Renaissance poets and dramatists.
Myth, Ritual and Authority. 3 credit hours. Zaninovich. This course will consider mythological and religious literature from a number of cultures (e.g., Sumero-Babylonian, Japanese, Greek) and will examine that literature as a possible source of ideas about social and political order.
Nonmuseum Art. 3 credit hours .Lanier.
An analytic survey of functional art and its social value.
Early Chinese Perceptions of Landscape. 3 credit hours. Jacobson-Leong. A study of the Chinese idea of landscape and space in general as symbolic of philosophical and religious concepts.
Disaster and Society. 3 credit hours. Mate. Analyzes medieval responses to disaster and their historical and sociai significance.
Nature of Man. 3 credit hours. Alexander.
Romanticism, Philosophy, and the Arts.
3 credit hours. Zweig.
Political Drama. 3 credit hours.
Zaninovich.
Pre-Christian Judaism. 3 credit hours.
Sanders.
Venice: Melting Pot of East and West. 3 credit hours. Giustina.
German Society and the Arts: 1871-1845. Achberger.

General Humanities students may also be interested in the following courses:
Bi 370. The Human Environment. 3 credit hours.
Cl 307, 308, 309. Classical World. 3 credit hours each term.
Cl 321. Classic Myths. 3 credit hours. Hst 313. Enlightenment and Revolution. 3 credit hours.
Hist 411. History of Greece. (G) 3 credit hours.
Hst 412, 413. History of Rome. (G) 3 credit hours each term.
Hst 434, 435, 436. Making of the Western Mind. (G) 4 credit hours each term.

Hst 439. From Wordsworth to Marx. (G) 3 credit hours.

Hst 440. From Nietzsche to Freud.
(G) 3 credit hours.

LA 407. Seminar in Landscape Perception. (g) 3 credit hours. Mtli 152. Mathematical Symmetry.

## General Literature

Steven Rendall, Pli.D., Department of Romance Languages, Chairman, General Literature Committee. The General Literature progran leads to the Bachelor of Arts degree and offers the opportunity to pursue an organized course of study transcending the limitations of a departmental major. It provides suitable training for advanced study in literature as well as a general liberal arts background.

Students in the General Literature progran study two or more literatures, of which at least one is a foreign literature read in the original language. Foreign literatures read in translation may also be included as part of the student's program ; courses on German, Russian, Scandanavian, Japanese, Chinese, and other literatures are regularly offered.

The General Literature program offers many opportunities for smallgroup study in close contact with faculty members. Working with an adviser, the student develops a plan of study suited to his or her individual interests; this may focus on a period, a genre, a theme, or the relations between two or more national literatures.

In addition to the regular program, an honors option may be chosen by qualified students. This option includes further language study and the writing of a senior essay under the supervision of a faculty member. The honors option is particularly valuable to students intending to do advanced work in comparative literature or related fields. Note: Students with interests in nonWestern literatures are welcomed in the program.

## The General Literature Major Lower-Division Requirements:

 Satisfaction of the University language requirements for the Bachelor of Arts degree.English 107, 108, 109 (World Literature). Students with sufficient background may substitute a three-term survey of a single literature.
History 101, 102, 103 or History 207, 208, 209. Students with sufficient background may take three advanced history courses to fulfill this requirement.

## Upper-Division Requirements:

45 credit hours in literature, including :
(a) 15 hours in a foreign literature read in the original language, and
(b) 30 additional hours in literature, read either in the original or in translation. At least 9 of these hours must be in General Literature courses.

## Honors in General Literature

The requirements for honors in General Literature include all of the above plus
(a) 9 additional hours in a second foreign literature read in the original language, and
(b) a senior essay written under the direction of a faculty member. Students choosing this option will enroll for two terms of Thesis (G Lit 403), the senior essay to be presented at the end of the second term. This work may be counted toward the requirement of 9 hours in General Literature courses.
G Lit 199. Special Studies. 1-3 credit hours.
G Lit 403. Thesis. 3 credit hours.
G Lit 405. Reading and Conference. (g) Credit hours to be arranged.
G Lit 407. Seminar. (g) Credit hours vary. May be taken for graduate minor credit. All reading may be done in translation. Recent topics include:
Anti-theater. 3 credit hours. Sohlich.
Selected readings of Jarry, Anouilh, Ionesco, Genet, Durrenmatt, Pinter, and Brecht with critical readings in dramatic theory and social history.
Pirandello: Theater. 3 credit hours.
Giustina. An examination of Pirandello's experiments with the theater, of his characteristic themes (reality vs. illusion, roleplaying, the character-actor relationship), and of the reflection of these elements in other modern dramatists.
The Novel of Youth and Crisis. 3 credit hours. Stevenson. A comparative study of 19th- and early 20 th-century novels dealing with the problems of identity, maturation, and the individual's confrontation with the world. Novelists to be studied will include Austen, Stendahl, Dostoevsky, James, Conrad, and Lawrence.

## Autobiography. 3 credit hours. Rendall.

To write an autobiography is to try to make sense of one's life. This course will focus on works by St. Augustine, St. Teresa, Rousseau, Gorky, Leiris, Sartre, and C. S. Lewis, in which these authors grapple with the problems of creating an image of themselves and communicating it to their public.
Living Together. 3 credit hours. Birn. The course will investigate how five or six novelists such as Voltaire, Mann, Hamsun treat the activities of individuals within specific community settings, for instance a room, a middle-class apartment house, a sanitarium, a farm, a city under quarantine. The following questions will be raised: How do individuals react toward the group: How is authority established and undermined? Is authority necessary?
G Lit 410. Experimental Course. (g) Credit hours vary. May be taken for graduate minor credit. All readings may be done in translation. Several courses offered each term ; recent topics include :

Play Within a Play. 3 credit hours fall term. Giustina. The evolution and function of the play-within-a-play in English, Italian, and French drama from Shakespeare to Pirandello and Anouilh.
Medicean Florence and the Revival of Greek. 3 credit hours winter term. Hatzantonis. The literary, artistic, and cultural phenomena which characterized Florence in the late 15th century and helped to establish the primary intellectual concerns of the Renaissance. Subjects to be considered include the historical background of Medicean Florence, the restoration of direct knowledge of ancient Greek language and literature, and the emergence of new literary forms and philosophical ideas.

## European Tradition and the Development

 of Russian Drama. 3 credit hours winter term. Page. The relatively late Russian discovery of Classical, Neo-Classical, and Shakespearean theater, and the interplay of these models with traditional East Slavic and East European forms, such as late-medieval East Orthodox church and school drama, puppet theater, and vaudeville. The fusing of these various sources will be traced in the 19th-century Russian theater, culminating in Chekhov.Modern Experimental Drama. 3 credit hours spring term. Gontrum. Singles out elements of innovative form in the works of such playwrights as Strindberg, Jarry, Wedekind, Kaiser, Mayakovsky, Brecht, and Wilder and traces them in selected works of the contemporary theater by such authors as Ionesco, Dürrenmatt, Beckett, Frisch, Genet, Pinter, Albee, Weiss, and Handke. Contributions of the modern German theater to the development of experimental drama in the 20th century. Class discussions wil also explore the impact of Brecht's and Artaud's visions for a new theater on more recent playwrights.
The Theme of Rebellion in Literature. 3 credit hours sping term. W. Calin. Study of the theme of the rebel and of the individual and society, concentrating on two periods of Western literature: the Middle Ages and the twentieth century. Literary analysis of topics such as the hero, realism, literary structure, archetype, point of view. Marxist, Freudian, Jungian, phenomenological approaches are scrutinized.

## Just and Unjust Worlds in Chinese and

 Western Literature. 3 credit hours spring term. Fish. It has been the belief of various peoples that they would be dealt with justly, as they conceived it, so long as their universe (religious or secular or both) was in harmony and operating as it should. The concept of justice in the traditional Chinese universe will be examined, along with reactions in the literature to its apparent breakdown. Incidents of the lapse or betrayal of just universes in Western literature will be analyzed and compared with those from the Chinese.Classical Backgrounds of the Renaissance. 3 credit hours. Grudin. A study of classical works which significantly influenced Renaissance thought and style. Readings will include Plato, Aristotle, Virgil, Horace, and Plutarch.

## The Realist Novel. 3 credit hours. Ball.

 A study of realism in novels by Stendahl, Turgenev, George Eliot, Galdós, James, Verga, Zola, Norris, Mann, as the dominant literary mode of the 19th and early 20th centuries, developing out of romanticism and merging into naturalism. Through focus on characters in conflict with structures of modern society, close relations betweenpsychological and critical social realism will be explored.
The Picaresque Novel. 3 credit hours.
Woods. Classics of the picaresque tradition from the 16 th century up to the present. Readings will include Lazarillo de Tormes, Defoe, Fielding, and Mann.
Society and Solitude: Studies in Pastoral. 3 credit hours. Hart. Recent studies of literary pastoral have transformed our notions of the genre. No longer seen as an artificial flight from reality, the pastoral presents a contrast between two kinds of society and in doing so, examines the relationship of the individual to his society. The seminar will examine works by Virgil, Cervantes, Shakespeare, Tolstoy, Henry James, Claude Levi-Strauss, and others in the light of these views.
G Lit 460. Experimental Fiction. (g) 3
credit hours. Hynes. This course begins with some earlier work and moves thereafter to a concentration on the fiction of our contemporaries in several countries. The purpose is to study formal deviations from the norms of fictional realism. Authors likely to be read include Beckett, Borges, Fowles, and RobbeGrillet.
The following courses are available in translation:
Chn 307, 308, 309. Introduction to Chinese Literature. 3 credit hours each term.
Chn 407. Seminar in Chinese Literature. (G) 3 credit hours.
Chn 461. Chinese Classics. 3 credit hours.
Chn 462. Twentieth-Century Chinese Literature. 3 credit hours.
$\mathrm{Cl} 301,302,303$. Literature of the Ancient World. 3 credit hours each termí.
Cl 321. Classic Myths. 3 credit hours. Cl 407. Seminar in Classical Literature. 3 credit hours.
GL 250. Goethe and His Contemporaries in Translation. 3 credit hours. GL 251. Thomas Mann, Kafka and Hesse in Translation. 3 credit hours. GL 252. Brecht and Modern German Drama in Translation. 3 credit hours. GL 351, 352, 353. Scandinavian Literature in Translation. 3 credit hours each term.
Jpn 301, 302, 303. Introduction to Japanese Literature. 3 credit hours each term.
Jpn 407. Seminar in Japanese Literature. (G) 3 credit hours each term.
RL 360. Cervantes. 3 credit hours.
RL 464, 465, 466. Dante and His Times. (G) 3 credit hours each term.

SL 313, 314, 315. Introduction to Russian Literature. 3 credit hours each term.
SL 340, 341, 342. Russian Culture and Civilization. 3 credit hours each term. SL 420. Modern Russian Novel. (G) 3 credit hours.
SL 421. Modern Russian Short Story. (G) 3 credit hours.

SL 422. Modern Russian Poetry. (G) 3 credit hours.
SL 423. Modern Russian Drama. (G) 3 credit hours.
SL 424. Dostoevsky. (G) 3 credit hours.
SL 425. Tolstoy. (G) 3 credit hours.
SL 426. Gogol. (G) 3 credit hours.
SL 427. Turgenev. (G) 3 credit hours.
SL 428. Chekhov. (G) 3 credit hours.
SL 429. Soviet Russian Literature.
(G) 3 credit hours.

## General Science

Glenn Beelman, A.M., Chairmän, Senior Instructor in Mathematics, General Science Committee.
The curriculum in General Science is intended for students who want to build a progrant of cultural studies around a central interest in science, for students preparing for professional careers in the health sciences, and for prospective science teachers. The requirements for the baccalaureate degree in General Science may be met through the threeyear premedical or predental curriculum followed by a year of work in the medical or dental school. For information and advising assignments, students should report to the Office of Academic Advising (107 Friendly Hall).

The General Science major leads to the Bachelor of Arts or Bachelor of Science degree.
(I) Lower-Division Requirenent: A minimum of three courses in each of four sciences selected from the sciences and course numbers listed below. (Upper-division courses may be substituted for lower-division work, but will not also apply toward fulfilling the upper-division requirement.)
(a) Biology : 101-107 and 212-272.
(b) Chemistry : 101-103, 104-106
(laboratories 107-109 required), 121, 123, 204-206 (laboratories 207-209 required).
(c) Computer Science : 201-203.
(d) Geology : 101-103 (laboratories

104-106 required), 201-203, 291, 292.
(e) Mathematics: 101-233, excluding 121, 122, 123, and 199.
(f) Physics: 101-131, 201-203 or 211213 (laboratories 204-206 required).
(g) Psychology : 211-213 or 217-219.
(II) Upper-Division Requirements: A minimum of 30 graded (passdifferentiated) upper-division credit hours in approved science courses, with a Grade Point Average of C (2.00) or better. Not more than four of the upperdivision hours may be in courses
numbered 400-410. At least nine hours must be taken in each of two fields, selected from Anthropology, Biology, Chemistry, Computer Science, Geography, Geology, Linguistics, Mathematics, Physics, and Psychology. Only those Anthropology, Geography, Linguistics, and Psychology courses that satisfy the University Group Requirements in science may be used in fulfilling the major requirements in General Science.
(III) Students majoring in General Science and one or more other areas at the same time should be aware that upper-division credits used to meet minimum requirements of another designated major may not also be used in satisfaction of upper-division requirements in General Science.

## Secondary-School Certification.

Subject matter requirements for high school certification in (1) Integrated Science and in (2) Earth Science can be met with a major in General Science
(1) Integrated Science. Certification as a teacher of science in Oregon public junior or senior high schools requires satisfactory completion of a program of teacher education which includes subject matter preparation in the sciences and in professional education, plus the recommendation of the institution in which the preparation is completed. The General Science Program offers work leading toward an Oregon teaching endorsement in specified science fields at the Basic and Standard certification levels, as determined by the Oregon Teacher Standards and Practices Commission. The University's programs to prepare science teachers are subject to revision to meet changes in certification requirements mandated by the Commission effective January 1, 1980. For specific information regarding requirements for one of the science teaching endorsements, students should consult the program endorsement adviser for Teacher Education, and the Office of Secondary Education in the College of Education.
(2) Earth Science. The requirements for certification in Earth Science appear in the Undergraduate Studies section of Geology of this Catalog.
GS 104, 105, 106. Physical-Science Survey. 3 credit hours each term. General introduction to the physical sciences; principles of astronomy, physics, chemistry, geological processes, and man's relation to them. Special emphasis on scientific method. Three lectures.
GS 107, 108, 109. Physical Science for Elementary Education Majors. 4 credit hours each term. General introduction to the physical sciences; principles of astronomy. physics and chemistry, geologic processes,
and man's relation to them. Introduction to experimental principles and methods in a laboratory designed for prospective elementary school teachers. Not a methods course in teaching science. Three lectures, one twohour laboratory.
GS 216. Science, Society, and Culture. 3 credit hours. The nature and development of western science and technology and its interaction with nonwestern cultures. The impact of modern science on American society and its role in the developing countries. Science and national policy formation.
HC 207, 208, 209. Honors College General Science. 3 credit hours each term. Introduction to certain basic concepts, terms, and methods of modern physical science, with emphasis on the interrelations of the physical sciences with each other and with other fields of knowledge. Three lectures.
GS 407. Seminar. Credit hours to be arranged.

## General Social Science

The University Faculty terminated the General Social Science program on March 11, 1974. The program is accordingly now closed to new students.

Students enrolled in the program as of Winter 1977 will be permitted to complete their work and receive a degree in General Social Science.

For information, students may consult Assistant Professor Ann G. Simonds, Department of Anthropology.

## Latin American Studies

Clarence E. Thurber, Ph.D., CSPA. Carl Johannessen, Ph.D., Geography. Colette Craig, Ph.D., Linguistics.
Associated faculty:
Don Dumond, Martin Horeis, Izumi Shimada, William Ayres, Phillip Young (Anthropology) ; John Mrowka (Geography) ; Raymond Mikesell (Economics) ; Richard Gale (Sociology) ; Mark Falcoff, Paul Holbo (History) ; Enrique Lamadrid, Jorge Ayora, David Curland (Spanish) ; Eugene Barnes (Library) ; Daniel Goldrich (Political Science).

The University offers undergraduate and graduate programs in Latin American Studies under the auspices of the interdisciplinary Committee on Latin American Studies. No degree in Latin American Studies is available in the University.

The requirements for the undergraduate program in Latin American Studies are:
(1) Geography. Latin America (Geog 202).
(2) History. Hispanic America (Hst $350,351,352)$.
(3) Language. The equivalent of two years of college Spanish or Portuguese or both.
(4) A major concentration in either Anthropology, Geography, History or Spanish Literature. Requirements for each of these areas are:
(1) General Anthropology (Anth 101, 102, 103) ; (2) 9 hours in physical anthropology courses numbered 300 499 ; (3) 9 hours in cultural anthropology courses numbered 300-499 including: The American Indian: Mexico and Central America (Anth 418), and The American Indian : South America (Anth 419) ; (4) 9 hours in prehistory courses including: New World Prehistory: Middle America (Anth 462), and New World Prehistory : South America (Anth 463) ;
(5) 6 additional hours in Latin

American anthropology chosen from: Modern Latin America (Anth 407) ; Research: Latin America (Anth 401) ; Readings: Latin America (Anth 405).

The advisers for Latin American Anthropology are Philip Young, and Don Dumond.

Geography: A minimum of 33 additional credit hours in geography, of which 24 must be upper division. Specific requirements include: (1) 9 hours of basic geography chosen from: The Natural Environment (Geog 101), Landscape, Environment and Culture (Geog 103), Urban Environment (Geog 105), Reading and Interpretation of Maps (Geog 280) ; (2) 12 additional hours of Latin American Geography chosen from: The South American Tropics (Geog 461), Southern South America (Geog 462), Geography of Middle America (Geog 463), Seminar: The Latin American City (Geog 407), Seminar: Latin America (Geog 407), Research: Latin America (Geog 401), Readings: Latin America (Geog 405).

The adviser for Latin American Geography is Carl L. Johannessen.
History: A minimum of 36 additional credit hours in history, of which 18 must be upper division, including:
(1) Western Civilization (Hst 101, 102, 103); (2) 6 additional hours in Latin American history chosen from: History of Spain (Hst 464), Cuba in the Modern World (Hst 465), Seminar: Latin America (Hst 407),
Research: Latin America (Hst 401), Readings: Latin America (Hst 405); (3) At least 12 hours of the history program must be in courses numbered 400 to 499.

The adviser for Latin American History is Mark Falcoff.

Spanish Literature: A minimum of 36 upper-division credit hours in Spanish including:
(1) Three courses in Spanish composition at the 300 or 400 level; (2) 27 hours in Spanish and Spanish American including: (a) Spanish Literature: Introduction to Reading of Spanish Literature (RL 311), Modern Spanish Literature (RL 314) ; Cervantes (RL 360) ; (b) Latin American Literature: 12 hours chosen from: Spanish American Literature (RL 315), Spanish American Literature (RL 444, 445, 446), Readlings in Latin American Literature (RL 405), Seminar: Latin American Fiction (RL 407).

The advisers for Latin American Literature are Jorge Ayora, David Curland, and Enrique Lamadrid.
(5) Latin American area courses. A minimum of 12 hours in fields other than the major concentration ( 4 above) selected from: South American
Tropics (Geog 461) ; Southern South America (Geog 462) ; Geography of Middle America (Geog 463); Seminar : The Latin American City (Geog 407) ; Seminar: Latin American Rural Settlement (Geog 407) ; History of Mexico (Hst 464) ; Cuba in the Modern World (Hst 465) ; The American Indian: Mexico and Central America (Antl 418) ; The American Indian: South America (Anth 419) ; New World Prehistory: Middle America (Anth 462) ; New World Prehistory: South America (Anth 463 ) ; Government and Politics of Latin America (PS 463, 464) ; Art in Latin America (ArH 454, 455, 456) ; Modern Latin America (Anth 407).

The Wallace School of Community Service and Public Affairs offers an option in Latin American studies at the undergraduate level in its niajor in international development. A mininnum of 36 credit hours in CSPA courses is required, of which 12 may be earned through field study. Clarence E. Thurber, professor of international and public affairs, is the adviser for this program.

Specialization in Latin American Stuclies at the graduate level is possible in a number of departments in the College of Arts and Sciences. Anthropology, economics, geography, history, an interdisciplinary master's degree program in international studies (CSPA), Spanish, sociology, and political science have graduate faculty competent and interested in the area and it is possible to arrange graduate programs in these fields with a concentration of work in Latin American Stuclies.

High school students who have taken
courses in political science, economics, history or other approaches to international affairs, or who have participated in extra-curricular activities (such as the Oregon High School International Relations League) may well be interested in Latin American Studies.

Community college students who have taken courses in International Relations may be interested in specializing in the program for Latin American Studies.

Career opportunities for students completing Latin Anerican Studies are available through such avenues as the Peace Corps, the United States Foreign Service (including U.S. Information Service), the foreign-aid programs of the American government, the United Nations, and through private foundations, international businesses, and international church organizations.

## Russian and East European Studies Center

James L. Rice, Ph.D., Associate Professor of Russian, Director.
Joseph Fiszman, Ph.D., Professor of Political Science, Associate Director. George Zaninovich, Ph.D., Professor of Political Science, Associate Director.
The Russian and East European Studies Center (REESC) is composed of specialists from several departments and professional schools, engaged in the study of societies, history, languages, and contemporary problems of the people in Russia (Soviet Union) and East Europe. REESC supports basic training and interdisciplinary study on all levels in the University community, brings students and faculty with mutual interests together to share their work-in-progress, and assists individual students to plan their curriculum in language and area studies. REESC also provides individual counseling for the choice of graduate degree programs at the University of Oregon or at other major area-studlies centers in the United States and abroad, and individual career counseling.
REESC maintains close contact with University of Oregon graduates in Russian and East European language and area studies, and with professional colleagues around the country, who supply current news on the job market. Staff members have extensive experience in research and study exchange programs abroad, and every year University of Oregon undergraduates and graduate students are placed in such programs.

Fields currently represented in REESC progranis and courses include History, Political Science, Art History, Geography, Economics, Anthropology, Music, Dance, Language, Literature, Religious Studies, Education, Business, and Library Science. A basic introduction to the whole interdisciplinary program of Russian and East European studies is given (without prerequisite) in SL 199, The Slavic World, a oneterm course offered each year jointly by members and associates of REESC, who discuss their personal interests and special fields in the area.

The REESC places emphasis on its undergraduate program. The first objective is to prepare Oregon undergraduates for significant careers and a lifelong expert interest in the Russian and East European area--a territory extending across half the world's time zones and settled by over 350 million people. Solid training is offered in Russian and other East European languages and cultures. The University offers B.A. and M.A. degree programs in Russian Language and Literature, and an undergraduate Russian and East European Area Studies Certificate Program (described below). Advanced degree candidates in the social sciences, humanities, and professional schools may arrange individual programs with special emphasis on Russian and East European topics. Students interested in pursuing specialized area studies are encouraged to seek assistance of any nember of the REESC staff.
REESC staff members: Eugene Barnes (Library) ; John Fred Beebe (Russian) ; Joseph Fiszman (Political Science) ; Anna Kaminska (Polish) ; Alan Kimball (History) ; A. D. McKenzie (Art History) ; Judith Merkle (Political Science) ; Albert Leong (Russian) ; Tanya Page (Russian) ; James Rice (Russian) ; Howard Robertson (Library) ; Stephen Reynolds (Religious Studies) ; Sherwin Simmons (Art History) ; Ronald Wixman (Geography); Fruim Yurevich (Russian) ; George Zaninovich (Political Science).

## Russian and East European Area Studies Certificate Program for Undergraduates

This program offers guidance to students majoring in the various departments represented in the Russian and East European Studies Center, encourages the integration of course material from the different disciplines in the area, and with the certificate gives formal recognition of the interdisciplinary work accomplished. With
the approval of the Center's Program Director, students majoring in fields not represented in the Center may be admitted to the Certificate Program.

In addition to general University requirements for graduation and degree requirements in the student's major department, the following three requirements must be net before a Russian and East European Area Studies Certificate may be awarded:
(I) Language: three years of language study ( 45 hours), usually Russian, though in individual cases other East European languages may be substituted. (II) Core courses: (6 hours) normally to include:
(A) SL 199, The Slavic World (3 hours), an introductory course offered each year jointly by all Russian and East European Studies staff members. (B) At least one seminar, colloquium, or private reading course conducted by Center staff members ( 405,407 , or 408 ; 3 credit hours).
(III) Electives (9 hours)-three additional courses or seminars in the Russian and East European Studies area outside the student's major department. Normally such courses will be offered by the Center staff; other courses may be approved by the Center's Program Director.

## Departments and Course Offerings:

Russian Language and Literature:
(Courses offered in the Department of German and Russian, coded with prefix SL for "Slavic.") First-, Second-, Third- and Fourth-Year Russian. FirstYear Serbo-Croatian, Polish, Czech, and Ukrainian. Russian Phonetics. Structure of Russian. Old Church Slavonic. Research Methods in Russian. History of Russian.

Introduction to Russian Literature. Russian Culture and Civilization. Polish Culture and Civilization. Modern Russian Novel. Modern Russian Short Story. Modern Russian Poetry. Modern Russian Drama. Dostoevsky. Tolstoy. Gogol. Turgenev. Chekhov. Soviet Russian Literature.
Research Methods in Russian. Old
Russian Literature. Russian Folklore.
Eighteenth-Century Russian Literature. Pushkin.

Special seminars: Nabokov, Émigré Russian Culture. Human Rights Movement in the Soviet Union.

Political Science: Marxist Political Theory. Government and Politics of the Soviet Union. Seminars: Comparative Communist Systems. Comparative East European Political Behavior. Marxism: Classical and Contemporary.

Marxism : Revolution vs. Guerrilla Warfare. Political Literature of USSR and Eastern Europe. Russian Revolutionary Theory. Sino-Soviet Relations. Yugoslav Society and Politics. Political Development in the Balkans. Comparative Communism: Theory and Method.

History: History of Russia. Byzantium and the Slavs. The Russian Revolution. Seminars and colloquia : Medieval Russia. Byzantium. Modern Russia. Revolutionary Social Movements. The Era of Great Reforms.

Art History: Russian Art. Early Christian and Byzantine Art. Later Byzantine Art. Medieval Russian Art. Seminars: Early Russian Painting. Medieval Serbian Painting.

Religious Studies: History of Eastern Orthodox Christianity. History of Christian Thought and Institutions.

## Other Courses:

Economics: Seminar on Marxian
Economics. Development of Industrial Economics. Comparative Economic Systems. Planned Economies. Economic History of Modern Europe. Geography: Geography of the USSR ; Soviet Nationalities; Balkan Nationalities.
Sociology: Seminar on Marxist Sociological Theory. Sociology of Work.
Dance : Folk Dances of the Balkans. Folk Dances of Central Europe. Near East Folk Dance. International Folk Dance.
Anthropology : Ethnography of the Balkans.

## University Library:

The library contains around 60,000 volumes in the Russian language, a growing collection of Serbo-Croatian materials, and an extensive collection of English language titles relating to Russia and Eastern Europe.

## Women's Studies

Mavis E. Mate, Pl.D., Associate Professor of History, Chairwoman, Women's Studies Council.
Barbara, Corrado Pope, Ph.D., Assistant Professor.
The Women's Studies Program, authorized by the State Board of Higher Education in July 1974, is administered by a Women's Studies Council consisting of faculty and student members. The program is interdisciplinary in drawing from many
areas of study available on campus: anthropology, architecture, business administration, counseling, economics, English, health education, history, political science, psychology, speech, sociology, and others that may participate in the future.

A Certificate in Women's Studies may be granted to students who complete 21 credit hours in courses which have been approved for the program by the Women's Studies Council. All students must take W St 101, Introduction to Women's Studies, and either W St 405,407 , or 409 . The other 15 hours should be taken from approved courses in three of the following areas:
(i) social sciences; (ii) literature and art; (iii) humanities; (iv) psychology and health science ; (v) third world and minority women. The student must complete a regular major in another department or school of the University.

## WSt 101. Introduction to Women's

Studies. 4 credit hours. An interdisciplinary investigation of the status and contribution of women and the expanding options open to them. Provides a basic framework for understanding the women's movement, historically and today, and attempts to connect the public issues it raises with the personal experiences of women. Required course for Women's Studies Certificate. Pope.
WSt 405. Reading and Conference. (g) Credit hours to be arranged.
WSt 407. Seminar. (g) Credit hours to be arranged.
WSt 408. Workshop. (g) Credit hours to be arranged.
WSt 409. Practicum. (g) Credit hours to be arranged.

## Prehealth Sciences

The College of Arts and Sciences and the College of Health, Physical Education, and Recreation supervise the following preprofessional health science programs. Information on other healthallied programs is available from Marliss Strange, Coordinator of Prehealth Sciences, Office of Academic Advising, 107 S. H. Friendly Hall.

## Dentistry, Preparatory

Donald E. Wimber, Ph.D., Professor of Biology, Chairman.
Marliss Strange, M.A., Office of Academic Advising, Coordinator.
The University offers a three-year predental curriculum which satisfies the requirements for admission to the School of Dentistry, University of Oregon Health Sciences Center, Portland and other accredited dental schools. The UOHSC School of Dentistry requires that predental students devote at least three years to their predental education, completing a minimum of 135 credit hours of which 115 credit hours, including all of the predental requirements, must be pass-differentiated. A "no-pass" for all other courses will be counted as a failing grade in the computation of the overall grade-point average. The completion of this curriculum and two years of dentalschool work satisfies all requirements for a bachelor's degree from the University with a major in general science. With the proper choice of electives in the predental curriculum, the student may qualify for a bachelor's degree with a major in biology.

Students who expect to complete the requirements for a bachelor's degree at the School of Dentistry should satisfy, in their predental program, all requirements for the degree (including general University requirements and requirements for a major in the College of Arts and Sciences) that cannot be satisfied with work taken at the School of Dentistry. For general University requirements for a bachelor's degree, see the General Information section of this catalog.

Although a bachelor's degree is not prerequisite to a professional degree in dentistry, the UOHSC School of Dentistry and most other dental schools recommend that their students qualify for this degree in addition to the professional degree.

The following courses satisfy both the science requirements for admission to the School of Dentistry and, with additional science instruction there,
the requirements for a major in general science.
Mathematics (above level of Mth 95) 12 credit hours.
General Chemistry (Ch 104, 105, 106) 9 credit hours.
Introductory Chemistry Laboratory (Ch 107), Introductory Analytical Chemistry I (Ch 108), Introductory Analytical Chemistry II (Ch 109) (fulfills the "Quantitative Analysis" requirements of the School of Dentistry) 6 credit hours.
Organic Chemistry (Ch $331,332,333$ ), Introductory Organic Laboratory (Ch $337,338) 13$ credit hours.
Biology (301, 302, 303) 15 credit hours (The lower-division biology courses do not meet the biology requirements for the School of Dentistry nor do they meet the biology major requirement). General Physics (Ph 201, 202, 203 or $\mathrm{Ph} 211,212,213$ ) with laboratories (Ph 204, 205, 206) 18 credit hours.

Predental students must realize that there is intense competition for admission to the School of Dentistry. The average GPA of the entering class of 1977 was 3.4. If the GPA is less than 3.0, there is very little possibility for acceptance. However, the Admissions Committee of the School of Dentistry makes special allowance for those students who start off poorly and then achieve substantial improvements in the predental work.

Aptitude tests given by the American Dental Association should be taken not later than the fall term one year before admission. Applications to take this test must be made well in advance of the scheduled date of the test. A pamphlet describing the test, giving dates and places where it will be given and also providing information as to how to apply, is available in the Office of Academic Advising, 107 Friendly.

Three letters of evaluation are required by the UOHSC School of Dentistry: one each from teachers of biology, chemistry, and physics. It is important to have these evaluations from teachers who have actually worked with the predental student, if the information is to be of any value for the Admissions Committee. In large classes, a more meaningful evaluation can be obtained from a laboratory teaching assistant, rather than from the professor who gives the lectures and who has had no personal contact with the student. The evaluation should be obtained immediately following the conclusion of a term's work. Forms for the evaluations are available in the Office of Academic Advising.

Dental schools recommend that the predental student, in addition to completing the basic requirements listed above, choose electives which will broaden one's cultural background as well as strengthen one's scientific training. Courses in the following fields are suggested: developmental biology, microbiology, genetics, physical chemistry, mathematics, foreign language (completion of a second-year course), philosophy, public speaking, music and art appreciation, history, economics, sociology, psychology, literature, anthropology, and personnel management. Students are advised to explore their own interests and obtain the best possible general cultural education. The guidance of predental advisers in course planning is indispensable and their counsel should be sought at regular intervals.

## Medicine, Preparatory

William Sistrom, Ph.D., Professor of Biology, Chairman, Premedical Advisory Committee.
Marliss Strange, M.A., Office of Academic Advising, Coordinator.
The University offers a premedical program which satisfies the requirements for admission to the University of Oregon Health Sciences Center School of Medicine in Portland and most American medical schools. The program is supervised by the Premedical Advisory Committee, composed of faculty members on the Eugene campus, a physician, and the PreHealth Sciences Coordinator.

Medical schools have varying admission requirements which are listed in the publication, Medical School Admission Requirements (order blanks for this book are available in the Office of Academic Advising PreHealth Science Information Center, 107 S. H. Friendly Hall). Since most students seek admission to five or six medical schools besides the University of Oregon Health Sciences Center School of Medicine, this book should be purchased or at least consulted.

The minimum requirements for admission to the UOHSC School of Medicine and many other medical schools can be met with the following classes:
(1) General Chemistry (Ch 104, 105, 106 or $\mathrm{Ch} 204,205,206$ ) with laboratories (Ch 107, 108, 109 or Ch 207, 208, 209). The laboratories fulfill the "Quantitative Analysis" requirements of the School of Medicine. Organic Chemistry (Ch 331, 332, 333) with laboratories ( $\mathrm{Ch} 337,338$ ).
(2) Three terms of Biology covering basic concepts of cell structure and function, developmental biology (embryology), and genetics. Premedical students may take the sequence Bi 304, 305, 306, Molecular, Developmental, and Neurobiology, to meet these requirements. This sequence has Organic Chemistry ( $\mathrm{Cl} 331,332$ ) as a prerequisite. Alternatively, premedical students may take the sequence $\operatorname{Bi} 301$, 302, 303, with Organic Chemistry taken concurrently, plus an approved course in Genetics. Premedical students who are Biology majors should take the two sequences in order.
Students are advised not to satisfy the Medical School biology requirement entirely with 100 -level courses in biology.
(3) College level mathematics: 12 credit hours including an introductory course in calculus.
(4) General Physics (Ph 201, 202, 203 or $\mathrm{Ph} 211,212,213$ ) with laboratories (Ph 204, 205, 206).
(5) A minimum of six credit hours of Psychology, satisfying either the social science or the science group requirements.

Specific courses are recommendations only, and, in some instances alternative courses may be acceptable or preferred to meet major requirements. Transfer students and post-baccalaureate students may meet the minimum requirements differently ; consultations with advisers and the Medical School Admissions Requirements is very important. More detailed information on curriculum, application to medical school procedures, and the medical profession is available in the Prehealth Science Information Center.

Most medical schools give preference to students with a baccalaureate degree in an academic subject matter; premedicine is not an academic major. The specific requirements for majors in the various departments are found in the catalog under department headings ; those for General Science are found on page 160 .

A few students are admitted to medical school at the end of their junior year, on the assumption that hours earned in medical school may be transferred back to the undergraduate institution to satisfy baccalaureate degree requirements in remaining upperdivision science hours. Students planning to enter medical school at the end of their junior year should constult regularly with advisers to make certain general University and major requirements are met.

Competition for medical school
admission has increased remarkably in the past few years. Selection for admission is based on many factors beyond the satisfactory completion of minimum requirements, including undergraduate grade averages, Medical College Admission Test scores, and letters of recommendation.

Currently, a 3.5 GPA is the national mean for accepted applicants, and it is tunlikely a candidate with a GPA of less than 3.0 would be accepted at most American schools. Furthermore, courses taken to satisfy the science requirements must be taken on a grade-differentiated basis. The pass-no pass option should be used sparingly on nonscience courses.

Nearly all medical colleges also require applicants to take the Medical College Admission Test, given in early spring and fall each year. Reservations for this examination must be made at least one month in advance of the scheduled date; reservation blanks are available in the Prehealth Sciences Information Center. The Center also has information in a manual which describes the test and provides practice questions and suggestions for preparing for the test. Applicants are encouraged to take the test in the spring of the calendar year immediately preceding the year of admission to medical school and not later than the fall term one year before anticipated admission.

Three to five letters of recommendation from experienced faculty are generally required by medical schools and used in the selection process. The importance of these letters cannot be over-emphasized. The University of Oregon Health Sciences Center School of Medicine prefers letters from the science faculty and from advisers who have known a student over several years. It is strongly recommended that premedical students secure letters from instructors immediately upon finishing classes and that students see advisers regularly, so an adviser will be able to write a meaningful recommendation when one is needed. Special information for recommendations is available in the Prehealth Sciences Center.

The University sponsors an honors and service society, the Asklepiads, for premedical students of sophomore standing or above. New members are selected each year primarily on the basis of academic excellence. The organization sponsors many active programs for its own members and other premedical students. These includes seminars and practica. Asklepiads provide experienced premedical students in the Prehealth Sciences Information Center to answer questions.

Osteopathic medical schools require basically the same minimum undergraduate program. A few schools request letters of recommendation from practicing osteopaths.

## Medical Technology

Bayard H. McConnaughey, Ph.D., Professor of Biology, Head Adviser. The University offers a four-year program in medical technology, leading to the baccalaureate degree. The program includes three years of work on the Eugene campus and one year at the University of Oregon Health Sciences Center in Portland or Sacred Heart Hospital School of Medical Technology in Eugene. The Bachelor of Science in Medical Technology is awarded by the Health Sciences Center in Portland to those whose fourth year is completed in Portland, and a Bachelor of Science in Health Education is awarded to those who take their fourth year in Eugene. Minimum admission requirements to medical technology training at the School of Medicine and at Sacred Heart Hospital are three years of college work including 24 credit hours of biology which must include a course in bacteriology, 24 credit hours of chemistry including one full year of a general college chemistry course with lectures and laboratory, and a course in organic chemistry or biochemistry, and one term of college mathematics; a course in physics is strongly recommended.

During the three years on the Eugene campus, the student must satisfy (1) all general University degree requirements for majors in professional schools that cannot be satisfied with work taken at the School of Medicine, and (2) the special science requirements for admission to the fourth-year program at the School of Medicine. The following recommended courses satisfy the science requirements :
(1) Chemistry. General Chemistry (Ch $104,105,106$ ) and laboratories ( $\mathrm{Ch}_{1} 107$, 108, 109). Organic Chemistry (Ch 331, 332,333 ) and laboratories ( Ch 337, 338). Quantitative Analysis ( Ch 324 ). (2) Biology. (Bi 301, 302, 303) or any three terms of Biology numbered 100-199, 12-15 credit hours. Introduction to Bacteriology (Bi 381, 383), 5 credit hours. Upper-division Biology, 3 credit hours.
(3) Physics. Any three terms of physics numbered 100-199, 9 credit hours.
(4) Mathematics. 12 credit hours, including Mth 101 or equivalent skills.

The curriculum for the fourth-year program at the School of Medicine is as follows:

Fall Term
Clinical Bacteriology (MT 410)
Credit Hours

Laboratory
Orientation (MT 413)
Clinical Biochemistry (MT 424)
Principles of
Hematology (MT 430)
Radioisotope
Techniques (MT 520)
Winter Term
Clinical Bacteriology (MT 411)6

Clinical Biochemistry (MT 425)
Special Hematology (MT 431)
3
Radioisotope
Techniques (MT 521)
Spring Term
Urinalysis (MT 414)
Historical Technique (MT 420)
Immunohematology (MT 432)
Applied Serology (MT 436)
Clinical Parasitology (MT 437)
Radioisotope
Laboratory (MT 522)
Students planning to graduate from the University of Oregon prior to their year of training in Medical Technology must meet all general University requirements for students in the College of Arts and Sciences (rather than those for majors in the professional schools) and all special requirements for their major (General Science, Biology, Chemistry, or other). Students who have completed their baccalaureate degree may take their Medical Techology training at any school or hospital in the country which offers such a program, rather than being limited to the University of Oregon Health Sciences Center in Portland and the Sacred Heart Hospital, Eugene.

Admission to professional training has become increasingly competitive in the last few years ; in 1974, for example, there were 150 applicants for the 50 available positions in Portland and 70 applicants for the six positions at Sacred Heart. Candidates with a GPA below 2.5 cannot be given serious consideration, and it is especially difficult for nonresidents to gain admission. Applicants are expected to submit in support of their candidacy four letters of recommendation, one each from faculty members in biology and chemistry and two from other academic or nonacademic sources. Students are advised to plan their curriculum in such a way that it will be possible to complete a bachelor degree with an appropriate major in one year if they are not admitted to the School of Medicine or Sacred Heart Hospital at the end of their junior year.

Nursing, Preparatory
Marliss Strange, M.A., Office of Academic Advising, Head Adviser.
The University of Oregon offers classes which satisfy admission requirements for the University of Oregon Health Sciences Center School of Nursing baccalaureate program in Portland. The program takes a minimum of one year of preprofessional work and three years of professional training and leads to a Bachelor of Science degree in nursing.
The recommended freshman prenursing program includes a minimum of 45 credit hours distributed as follows:
Elementary Chemistry 101, 102, 103
(which includes laboratories) or General Chemistry 104, 105, 106 and required additional laboratories 107 , 108, 109
English Composition 121 and either 123 or 323 (unless waived)
Nutrition: Health Education 252
Physical Education: 3 terms Social Sciences: 3 group-satisfying classes, including Cultural Anthropology 103
Arts and Letters : 3 group-satisfying classes
Electives: 3 group-satisfying classes to be chosen from Arts and Letters, Social Sciences or Sciences.
Some variation in the program is possible but students must consult with advisers ; no variation is permitted in the Chemistry, Nutrition, and credit requirements. Students must maintain a 2.5 GPA during the prenursing program to be eligible for admission.

Completion of the preprofessional program does not, however, guarantee admission to the School of Nursing or other baccalaureate programs in the state. Competition for available positions has increased over the last few years with preference being given to residents of Oregon. In addition to the curricular requirements, students must take the National League for Nursing, Prenursing, and Guidance Examination early in the freshman year; application blanks are available in the Office of Academic Advising.

Students must also file an application for admission between November 1 and February 15 of the winter term before anticipated matriculation; applications must be requested from the School of Nursing, Registrar's Office, 3181 S.W. Sam Jackson Park Road, Portland, Oregon 97201.

Students who choose to extend their preprofessional training to two years may take classes at the University of Oregon which will lighten their academic load by completing additional
graduation requirements. It will not, however, lessen the necessary three years spent in professional training.

The School of Nursing also has programs for the registered nurse who wants to complete a baccalaureate degree. The registered nurse must complete the basic freshman program as well as be currently licensed, but may apply for admission whenever prerequisite classes are completed.

## Pharmacy, Preparatory

LeRoy H. Klemm, Ph.D., Professor of Chemistry, Head Adviser.
The University of Oregon offers a twoyear program to prepare students for admission to the Oregon State University School of Pharmacy in Corvallis or to other accredited pharmacy schools. The curriculum listed below will meet the current Oregon State University requirements. Students considering other pharmacy schools should review available information in the Office of Academic Advising.

Prepharmacy curriculum for The School of Pharmacy, Oregon State University:

## First Year

General Chemistry: Ch 104, 105, 106, 107, 108, 109

> Credit Hours

107, 100, 109
English Composition: Wr 121
Physical Education: CPE 121-199
Calculus: Mth 201
Sociology (two courses): Soc 201; plus 206, 210, 211, 212, 213, 215, or 216
Psychology (two courses) : Psy 201, $211,212,213,214,215$, or 216
Arts and Letters
Second Year
Organic Chemistry: Ch 331, 332, 333, 337, 338
Biology (two courses): Bi 301, 302 , or 303
Bacteriology : Bi 381, 383
General Physics: Ph 201, 202, 204, 205
English Composition: Wr 123
Speech: RhCm 121
Arts and Letters
Total Credit Hours
Al .
Also required at Oregon State University : (may be interchanged with sequence from above)
Economics (3 courses) : Ec 201, 202 ; plus 203, 375, or 376

## Dental Hygiene

Robert E. Kime, Ph.D., Professor of Health Education, Head Adviser.
The University offers a program of study leading to dental-hygiene training and a degree from the School of Dentistry, University of Oregon Health Sciences Center in Portland. Details appear in the College of Health,

Physical Education, and Recreation section of this catalog. All predental hygiene advising is conducted by the Department of Health Education in that College (please see page 294).

## Preveterinary Medicine

Robert W. Morris, Ph.D., Professor of Biology, Head Adviser.
The University of Oregon has no program of studies specifically designed for preveterinary students. However, students on the University of Oregon campus may plan a schedule of preprofessional courses which satisfy the academic requirements for admission to the Tri-State Program in Veterinary Medicine (offered jointly by Oregon State University, Washington State University, and the University of Idaho) and for most United States schools of veterinary medicine. As requirements for admission vary considerably, students should consult regularly with their adviser.

## WICHE Programs in the Health Sciences

The WICHE Student Exchange Programs have been developed to help western students obtain access to fields of professional education that are not available in their home states. Oregon's participation in WICHE (Western Interstate Commission for Higher Education) enables qualified resident students to apply for assistance in the programs described below while attending institutions in any of the WICHE participating states. Assistance under these programs enables students to pay only the resident tuition and fees at state-supported institutions and reduced tuition and fees at independent institutions. Students must make application and obtain certification as Oregon residents prior to October 15 of the year preceding the academic year of anticipated enrollment. WICHE certification does not guarantee admission. Additional information and forms for application and certification may be obtained by writing to: Certifying Officer, WICHE, Post Office Box 3175, Eugene, Oregon 97403 , or by calling in person at room 203, Johnson Hall, UO Campus.

## Physical Therapy, Preparatory

Louis Osternig, Ph.D., Associate Professor of Physical Education, Head Adviser.

The University offers a prephysicaltherapy program which satisfies requirements for admission to most United States schools of physical therapy. Students may choose one of two admission tracks: (1) a student may obtain a baccalaureate degree, simultaneously fulfilling requirements for a major and for entrance into a physical therapy certificate program, or (2) a student may elect to transfer to a school of physical therapy after two years of study at the University of Oregon. The latter track would entail a transfer to a baccalaureate degree program in physical therapy.

Those students planning to obtain a degree should declare their majors relatively early so that physical therapy option requirements can be fulfilled within a chosen major. A specific major is not required for most postgraduate programs if certain course work is completed; however, since considerable physical science background is required for admission, most students usually choose a compatible major.

Those students planning to transfer after their sophomore year must fulfill virtually all of the physical therapy requirements within their lowerdivision work and must meet undergraduate graduation requirements (lower division) of the specific school to which they expect to be admitted.

Most schools require 12 hours each of biology, general chemistry, and general physics, and 6 hours each of human anatomy and human physiology. In addition, many schools require course work in abnormal psychology, kinesiology, and statistics. Letters of recommendation from the faculty may also be requested.

A number of practicum opportunities are available to students who wish experience working with a physical therapist. Such practica are nearly essential for admission to many schools.

Applications are made during the fall term one year in advance of expected enrollment. Most deadlines for application are in early winter and selections are made in March and April for the following fall.

Most schools of physical therapy will not accept students with grade point averages of less than 3.0. The competition for admission, however, has caused the mean grade point average for the accepted student to rise above this level.

Students wanting to enter the prephysical therapy program at the University of Oregon must be advised by the prephysical therapy adviser, preferably immediately after admission. Information pertinent to the specific admission requirements of the partici-
pating WICHE schools is also available in the Office of Academic Advising.

Occupational Therapy, Preparatory
Marliss Strange, M.A., Office of Academic Advising Head Adviser.

The University offers courses which satisfy the requirements for admission to United States schools of occupational therapy. Students may transfer into baccalaureate programs after two or three years of undergraduate study or enter a master's program after graduation. Because of variations in program requirements, students should consult with advisers early and often. Baccalaureate programs usually require undergraduate work in the biological or physical sciences or both, English, psychology, and sociology. Some also require such subjects as art, education, drawing and design, speech, and a foreign language.

Graduate programs, leading to a certificate of proficiency or a master's degree, require the same preparation as the transfer programs and a working knowledge of at least three manual and recreational skills and course work in drawing and design, music appreciation, speech, and woodworking. Applicants to the graduate programs must submit scores from the Graduate Record Examination Aptitude Test (GRE).

Both transfer and graduate programs require three letters of recommendation from undergraduate teachers, counselors, or employers.

Six western universities participate in the WICHE program. Further information is available in the Office of Academic Advising. Direct individual inquiries are welcomed by the American Occupation Therapy Association, 6000 Executive Boulevard, Rockville, Maryland, 20852.

## Optometry, Preparatory

The University offers courses which satisfy the requirements for admission to the twelve United States schools and colleges of optometry. Although specific requirements vary, all schools emphasize mathematics, general physics, general chemistry, and biology. Some require additional courses in the fields of organic chemistry, psychology, social science, literature, philosophy, statistics, and foreign languages.

All applicants must take the Optometry Colllege Admission Test (OCAT) which is usually given in November, January, and March; the
fall and winter testing dates are preferred. Applicants must also submit letters of evaluation from science instructors.

Information on the specific requirements, on the OCAT and on careers in optometry is available in the Office of Academic Advising. Direct individual inquiries are welcomed by the American Optometric Association, Division of Education and Manpower, 700 Chippewa Street, St. Louis, Missouri, 63119.

Pacific University in Forest Grove, Oregon, a private school, Southern California College of Optometry, and University of California, Berkeley participate in the WICHE program.

## Podiatry, Preparatory

The University offers courses which satisfy the requirements for admission to the five accredited colleges of podiatric medicine in the United States. A minimum of three years of prepodiatry college education is required for admission, but the majority of students have a baccalaureate degree. Courses in biology, chemistry (both inorganic and organic), English, physics and mathematics are required of all students. Additional background courses are frequently recommended.

Beginning in 1977, applicants are required to take the Medical College Admission Test (MCAT), usually given twice a year, and must also submit letters of evaluation from faculty members (including at least two from the science fields).

Information on the specific requirements, on the MCAT, and on careers in podiatry is available in the Office of Academic Advising. For further information, students may write to the American Podiatry Association, 20 Chevy Chase Circle, N.W., Washington, D.C., 20015.

California College of Podiatric Medicine, San Francisco, participates in the WICHE program.

## Public Health

Information on the seven WICHE participating programs in Public Health is available in the Office of Academic Advising. All of the programs require a baccalaureate degree. Although there is usually no designated undergraduate major required, there are often specific courses which must be completed before admission; therefore, students should begin consulting the catalogs of the participating schools early in the junior year at the University of Oregon.


## School of Architecture and Allied Arts

Robert S. Harris, M.F.A., Dean, Professor of Architecture. B.A., Rice, 1957 ; M.F.A., Princeton, 1960 ; Reg. Architect, Texas, Oregon. George M. Hodge, Jr., M.S., Assistant to the Dean, Professor of Architecture. B.S., 1949, M.S., 1950, Illinois ; Reg. Structural Engineer, Texas.

The School of Architecture and Allied Arts offers opportunities for study in the history, teaching, and practice of the arts, as well as professional education in architecture, interior architecture, landscape architecture, and urban planning. Approximately ten percent of the students on the Eugene campus are enrolled in the School's departments of Architecture, Art Education, Art History, Fine and Applied Arts, Landscape Architecture, and Urban Planning (graduate only). The School also includes the Institute for Community Art Studies and the Center for Environmental Research.

Admission, major requirements, and course offerings are described in detail in the departmental sections of this catalog. Freshmen and transfer students must meet University requirements for admission to the School of Architecture and Allied Arts. All previous work being submitted for transfer credit must be approved by the major department. Students are assisted in developing their programs of study by advisers from the department in which they have been admitted.
Many courses are open to nonmajors, especially in the departments of Fine and Applied Art and of Art History. Availability of some courses varies with student demand. Nonmajors are advised to consult the annual Time Schedule of Classes, and to check with the offices of departments offering the courses in which they want to enroll.

All departments offer studies leading to graduate degrees. Specific information about these programs will be found under the department headings and in the Graduate School section of this catalog.

The School of Architecture and Allied Arts is principally housed in Lawrence Hall. Facilities include a branch of the University library, administrative and departmental offices, and most of the faculty offices and
studio spaces. Some offices and studios are located in adjacent buildings.

For studio courses, the School provides desks, easels, and other major items of equipment not normally available to the individual. Students supply their own instruments and course materials. Student work may become the property of the School unless other arrangements are approved by the instructor.

## Center for Environmental Research

## Christie J. Coffin, M.Arch., Director.

The Center for Environmental Research was established to sustain and coordinate research dealing with important envirommental design questions relating to the built and altered environment. Through this emphasis it acts as an integrated research center, supporting research in Architecture, Landscape Architecture, and Urban Planning as well as those visual arts having major impact on the designed environment. The Center has three primary objectives which are: (1) to encourage research in environmental design by establishment of intra- and inter-disciplinary communication, (2) to give assistance to persons seeking support for projects, and (3) to coordinate the research emphasis in environmental design of the School.

The Center is involved in a broad range of research issues including (1) alternative energy sources, especially solar energy, (2) evaluations of building performance and the development of alternatives, (3) community and environmental planning, (4) patterns of space use in role settings, (5) historic preservation and preservation technology, and (6) environmental education. The Center also sponsors colloquia for presentation and review of research work from both within and without the School as a forum for discussing research issues, methods, and findings. An occasional-paper publications series ties research work done at Oregon to other centers of such activity, to national and international conferences, and to individuals interested in the application of research knowledge.

In line with its objectives in promoting research, and in particular the use of research materials, the Center attempts to play a major role in the education of designers. Students, both undergraduate and graduate, are encouraged to pursue research interests and to develop grant proposals around those interests.

## Institute for Community Art Studies

Gordon L. Kensler, Ed.D., Director.

The Institute for Community Art Studies is an interdisciplinary center relating the visual arts to social and environmental factors, as a basis for developing educational models.

Research is concerned with decisionmaking in the arts and the visual environnent, behavioral and aesthetic foundations of design, educational processes in the arts, and art as a means of social communication and cultural transmission.

Public service activities are focused on the development and evaluation of different aspects of the visual and environmental arts in the schools and communities of the state.

## Architecture

## Faculty

Jerry V. Finroze, M.Arch., Acting Department Head, Associate Professor of Architecture (design ; research methods and computer applications ; human environmental behavior; design theory). B.Arch., Washington, 1964 ; M.Arch., California, Berkeley, 1968 ; Reg. Architect, Oregon.
George F. Andrew's, B.S., Professor of Architecture (design ; housing ; new towns ; prehistoric architecture and settlement patterns). B.S., Michigan, 1941 ; NCARB Certificate ; Reg. Architect, Oregon.
John L. Briscoe, B.Arch., Professor of Architecture (structural design, tension structures, construction, financial feasibility). B.Architectural Engineering, Oklahoma State, 1950 ; NCARB Certificate; Reg. Architect, Oregon. (On sabbatical leave, winter, spring 1979.)
G. Z. Browen, M.Arch., Assistant Professor of Architecture (Design ; ECS ; effect of energy and material conservation on architectural form). B.A., 1964, M.A., 1966, Michigan State ; M.B.A., 1971, Akron; M.Arch., 1974, Yale.
Stanley W. Bryan, M.Arch., Professor of Architecture (design; office practice and construction management).
B.Arch., Washington, 1947 ; M.Arch., Massachusetts Institute of Technology, 1948 ; Reg. Architect, Oregon, Washington, California.
Christie J. Coffin, M.Arch., Assistant Professor of Architecture, Director, Center for Environmental Research. (design ; research methods; architectural project definition ; pattern language). B.A., 1965, Radcliffe ; M.Arch., 1969, California, Berkeley ; Reg. Architect, California.
Philip H. Dole, M.S., Professor of Architecture (design; settlement patterns ; vernacular ; utopias; pioneer Oregon architecture, preservation). B.Arch., Harvard, 1949 ; M.S., Columbia, 1954 ; Reg. Architect, New York.
Robert R. Ferens, M.Arch., Professor of Architecture (evolutionary and designed forms ; African building and planning). Diploma Arch., 1941,
B.Arch,. 1942, Pratt Institute; M.Arch., Massachusetts Institute of Technology, 1948 ; Reg. Architect, Nigeria. (On sabbatical leave, 1978-79.)
Gunilla K. Finrow', M.Arch., Assistant Professor of Architecture (design, building materials and detailing). Dipl. Arch., Swiss Federal Institute of Tech-
nology, 1963 ; M.Arch., California, Berkeley, 1967 ; Reg. Architect, Oregon. I.D.E.C. member.
Richard F. Garfield, B.Arch., Assistant Department Head, Assistant Professor of Architecture (design, construction processes). B.A., 1964, B.Arch., 1967, Pennsylvania; Reg. Architect, Pennsylvania.
Donald Genasci, M.A., Visiting Associate Professor of Architecture (history and theory, urban design). B.Arch., 1963, Oregon, Dipl. in Urban Design, 1965, Architecture Association, M.A., 1974, Essex.
Wilmot G. Gilland, M.F.A., Professor of Architecture (design procedure, creative process, form-context systems). A.B., 1955, M.F.A., 1960, Princeton; Reg. Architect, California, Oregon. Philip C. Gilmore, M.F.A., Associate Professor of Architecture (design; rehabilitation; the designer's community responsibility ; painting and sculpture). B.Arch., 1948, M.F.A., 1956, Oregon; Reg. Architect, Oregon. Thomas O. Hacker, M.Arch., Associate Professor of Architecture (design; historical comparison; building materials and processes) B.A., 1964, M.Arch., 1967, Pennsylvania.

Robert S. Harris, M.F.A., Professor of Architecture and Dean (design ; design process; public participation in decision-making ; learning from environments ). B.A., Rice; M.F.A., Princeton, 1960 ; Reg. Architect, Texas, Oregon.
Arthur W. Hawn, M.A., Associate Professor of Interior Architecture (design ; preservation ; history of furniture ; color; office landscape). B.A., 1961, M.A., 1964, Washington State ; I.D.E.C. membership.

Rosaria Hodydon, Dott. Arch., Assistant Professor of Architecture (design in urban density; historical/social context of center city revitalization ; design/working draw map continum ; counseling for architectural careers). Dottore in Architettura, University of Naples, 1945 ; Reg. Architect, Massachusetts.
George M. Hodge, Jr., M.S., Professor of Architecture (reinforced concrete construction ; prestressed concrete and earthquake design). B.S., 1949, M.S., in Architectural Engineering, 1950, Illinois; Reg. Structural Engineer, Texas.
Thomas C. Hubka, M.Arch., Assistant Professor of Architecture (image making and drawing in the design process, image of house and home ; New England vernacular architecture and farming history; architecture and
literature, neighborhood planning issues). B.Arch., Carnegie-Mellon, 1969 ; M.Arch., Oregon, 1972.
Wayne J. Jewett, M.F.A., Assistant Professor of Architecture (furniture design and construction; sculpture). B.S., 1970, M.F.A., 1972, Wisconsin.

Lyman T. Johnson, M.A., Professor of Interior Architecture (behavioral, technological influences in interiors; ergonomics; furniture design). B.A., 1957, M.A., 1959, California, Los Angeles; I.D.E.C. membership. William Kleinsasser, M.F.A., Professor of Architecture (design; experiental design considerations; design process; built demonstrations of design theory; work of Henry Mercer ). A.B., 1951, M.F.A., 1956, Princeton ; Reg. Architect, Pennsylvania, New York.
Ronald J. Lovinger, M.L.A., Professor of Landscape Architecture and Architecture (design; ecological, cultural, evolutionary characteristics of landscape form). B.F.A., Illinois, 1961 ; M.L.A., Pennsylvania, 1963.
Earl E. Moursund, M.Arch., Professor of Architecture (design; spatial composition and theory; medieval German village formation). B.S., Texas, 1949; M.Arch., Cranbrook Academy of Art, 1951; Reg. Architect, Texas.
Gary W. Moye, M.Arch., Assistant Professor of Architecture (design; media ; historical analysis). B.Arch:, 1967, Oregon; M.Arch., 1968, Pennsylvania; Reg. Architect, Pennsylvania, New York.
Michael R. Pease, B.Arch. Associate Professor (design, graphics, theory; neighborhoods and public places, pedestrian oriented communities; urban alternatives ; cooperation, complexity, integration, celebration). B.Arch., California, Berkeley, 1961 ; Reg. Architect, Colorado.
Donald L. Peting, M.Arch., Associate Professor of Architecture (design, structures; pneumatic structures; windmills ). B.Arch., Illinois, 1962 ; M.Arch., California, 1963 ; Reg. Architect, Washington.
James A. Pettinari, M.Arch., Assistant Professor of Architecture (design; historical analysis; renovation and preservation; urban form; graphic communication). B.Arch., Minnesota, 1966; M.Arch., Pennsylvania, 1970; Reg. Architect, Minnesota ; NCARB Certificate. (On leave fall 1978.)
Pasquale M. Piccioni, B.Arch., Associate Professor of Architecture (design ; light-space-structure relationship/ ecology/cultural ecology). B.Arch.,

Pennsylvania, 1960 ; Reg. Architect, Pennsylvania.
Guntis Plesums, M.Arch., Associate Professor of Architecture (design; structure systems; Japanese architecture ; user-completed housing).
B.Arch., Minnesota ; M.Arch., Massachusetts Institute of Technology, 1964 ; Reg. Architect, New York.
John S. Reynolds, M.Arch., Professor of Architecture (design; relating architecture, energy consumption, climate and society; environmental control systems). B.Arch., Illinois, 1962 ; M.Arch., Massachusetts Institute of Technology, 1967 ; Reg. Architect, Oregon, Massachusetts.
David Alan Sandahl, Ph.D., Assistant Professor of Architecture (design ; man-environment relations; design as an experiment in social behavior). B.Arch., California, Berkeley, 1967 ;
M.C.P., Massachusetts Institute of Technology, 1969 ; Ph.D., Pennsylvania State, 1976.
Michael E. Shellenbarger, M.S., Assistant Professor of Architecture (community design centers ; construction ; educational architecture). B.Arch., Iowa State, 1960 ; M.S., Columbia, 1966; NCARB Certificate; Reg. Architect, New York.
Stephen J. Y. Tang, Ph.D., Professor of Architecture (structural planning; methodology; decision-making; operations-research techniques). B.S., 1942, M.S., 1944, Illinois; Hon. Ph.D. in Arch., China Academy, Taiwan, 1974 ; Reg. Structural Engineer, Illinois.
Michael D. Utsey, M.Ev.D., Assistant Professor of Architecture (design; visual language, graphic projection, light, and color in space). B.Arch., Texas, 1967 ; M.Ev.D., Yale, 1971. (On sabbatical leave, winter, spring 1978-79.)

## Special Staff

Leslie Childress-Ullman, B.Arch., Visiting Lecturer (design, community planning). B.Arch., 1973, Oregon. Paul Edlund, B.Arch., Visiting Lecturer, (construction documents, specifications), B.Arch., 1956, Oregon; Reg. Architect, Oregon.
Dorothy C. Gilmore, B.Arch., Adjunct Professor of Architecture (design; historic preservation). B.A., 1944, B.Arch., 1950, Oregon.

Daniel M. Herbert, B.S., Assistant Professor of Architecture (design ; design process ; construction technology ). B.F.A., Colorado, 1951 ; B.S., Architectural Engineering, Illinois, 1954 ; Reg. Architect, Oregon.

Albert S. Pastine, B.A., Assistant Professor of Architecture (design, building materials, construction technology, environmental control systems). B.A., Cooper Union, New York, 1965 ; Reg. Architect, Oregon.
Otto Poticha, B.S., Associate Professor of Architecture (design ; architectural practice; community involvement in physical change). B.S., Cincinnati, 1958 ; NCARB Certificate ; Reg. Architect, Indiana, Oregon.
David Stea, Ph.D., Visiting Lecturer (environmental cognition, intentional communities). B.S., 1957, Carnegie Institute of Technology ; M.S., New Mexico, Ph.D., Stanford.
DeNorval Unthank, Jr., B.Arch., Associate Professor of Architecture (design; architectural practice; housing ; site analysis). B.Arch., Oregon, 1952 ; Reg. Architect, Oregon.

## Faculty Emeriti

Brownell Frasier, B.A., Associate Professor Emerita of Interior Design.
B.A., Oregon, 1921 ; at Oregon since 1931.

Frederick T. Hannaford, B.A., Professor Emeritus of Architecture. B.A., Washington State, 1924 ; Reg. Architect, Florida; at Oregon since 1946.
Wallace S. Hayden, B. Arch., Professor Emeritus of Architecture. B.Arch., Oregon, 1928 ; Reg. Architect, Oregon ; at Oregon since 1930.

Guest Lectutrers and Critics
George Agron, San Francisco.
John Amundson, Springfield.
Bruce Baccei, Norfolk.
Alvin Boyarsky, London.
Alan Colquhoun, London.
Henry Glassie, Philadelphia.
John Nicolais, Los Angeles.
Donald Parker, Eugene.
Derek Pike, London.
Joseph Rykzert, London.
Hanno Weber, St. Louis.
Beverly Willis, San Francisco. Antony Vidler, Princeton.
Graduate Teaching Fellows
Amedeo Andreini, D.Artt., 1975, Rome.
Kelcey Beardsley, B.A., 1969, Michigan.
Carl Burns, B.A., 1970, Oberlin. Frances Downing, B.Arch., 1976, Oregon.
Phillip Finley, B.Arch., 1976, Oregon. Elizabeth Gibbons, B.A., 1970, Newton College, Cert. BAC, 1976.

John Goldman, B.S., 1976, Yale.
Willian Hacker, B.A., 1967, Miami of Ohio.
Kathy Hastay, B.A., 1975, Portland State.
Paul Jurecka, B.Arch., 1969, Texas.
Rich Kirkpatrick, B.A., in Arch., 1976, Tllinois.
Annette LeCutyer, B.F.A., 1972, Colorado.
Jane Lidz, B.A., 1968, Sarah Lawrence.
David Lung, B.Arcl., 1974, Oregon.
Barbara-Jo Novitsky, B.A., 1970, California, Santa Cruz.
Daryl Plater, B.Ed., 1968, Victoria ; M.F.A., 1969, Institute Allende, Mexico.
Dennis L. Pacheco, B.Arch., 1976, Oregon.
Jon Thompson, B.Arcli., 1970, Texas.
Carol Venolia, B.A., 1973, Pomona College.

## Undergraduate Studies

The curriculum in architecture, leading to the degree of Bachelor of Architecture, is a five-year program. The program is designed to allow considerable flexibility in the establishment of study sequences according to the individual student's interests and needs, and in recognition of diverse opportunities in the profession. Although many students prepare for professional registration and apprenticeship with practicing architects, others go into such areas as community and neighborhood planning work; governmental agencies concerned with environmental policy formation, urban planning, programming, design and implementation ; and the construction industry. The teaching objectives of the Department of Architecture have two major components. One considers the study of architecture as a significant educational experience in relation to problemsolving abilities and awareness of crucial environmental issues. The other considers a detailed professional education in the development of understanding and skill in physical design on a continuum of scale from urban design to intimate personal space. An advising system provides close communication with faculty members in making decisions about specific directions of study emphasis. Potential applicants who have a previous undergraduate ( 4 year) degree in any field must apply to the graduate program (see section on graduate studies, page 173 for options).

Because interest in the program
exceeds the capacity of the department, prospective students are advised to make early application. New students are admitted into the program only in the fall term. Transfer students should be advised that an accelerated program will not normally be possible. Consult the department for advice on enrollment policies.

Departmental application deadlines: For past or present University of Oregon students, Jan. 15. For all other applicants, March 23. See section on admission to Graduate School for University application deadline. (page 26.)

The program requires that students engage work in all four of the following interrelated areas:

Interconnections Area: Develops a basic conceptual framework for understanding the physical environment. Examination of environmental issues, identification of human and material resources, and exploration of relational patterns between the department and the concerns of other areas in the School of Architecture and Allied Arts, in the University, and in the community. Courses are open to nonmajors.

Design Area: Provides opportunities to engage in comprehensive and integrative design on the physical environment. Students work in studio groups of fifteen with faculty members in the development of design-process skills. Emphasis is on the appropriateness of proposals as they satisfy the need to support a broad range of human activities.

Subject Area: Permits access to courses similarly focused on issues, theories, skills, methods, and research directly contributive to the field of architecture. The subject area is intended to support the teaching of architectural design and is grouped into seven sub-areas of special emphasis as follows: Design Theory and Procedure, Architectural Media, Environmental Control Systems, Structural Theory, Construction Processes, Physical Context, and Cultural Context.

Electives Area: Permits opportunities to develop individual interests. Students are especially encouraged to take courses in the University at large which are relevant to and supportive of environmental design studies.

Degree Requirements: Candidates for the Bachelor of Architecture degree must satisfy the following requirements, totaling 220 credit hours:
(1) General University requirements of 49 credit hours, distributed as follows : (a) group requirements, 36 credit hours in Arts and Letters, Social Sciences, and Sciences. Students are urged to
take courses which provide background for subsequent architecture as well as advanced University courses pertinent to architecture ; for example : art history, biology, geography, geology, literature, mathematics, physics, psychology, sociology; (b) English composition, 6 credit hours; (c) physical education, 5 credit hours;
(d) health education, 2 credit hours.
(2) Major program requirements of

171 credit hours, distributed as follows:
(a) Interconnections, Design, and

Subject Areas, 129 credit hours ; (b) Electives, 42 credit hours. As the study of architecture is integrative of understandings developed in many disciplines, the program encourages a mix of departmental and general University courses throughout the five-year course of study.
(3) Specific Departmental Requirements:
(a) Interconnections, 9 credit hours:

Fundamental Issues in Environmental Design (Arch 221, 222, 223).

## List B

Introduction to Numerical Computation
(CS 133).
Introduction to Time-Shared Computing (CS 245)
Group Communication ( RhCm 323 )
Mathematical Symmetry (Mth 152)

All regularly offered courses in Fine and Applied Arts.

Mineral Resources and the Environment
(Geol 321)
Physics of Energy and Pollution (Ph 114)
Climatology (Geog 482)
World Regional Climatology (Geog 487)
The Sun as a Future Energy Source (Ph 116)
STRUCTURAL THEORY
Introduction to Structures (Arch 365)
Theory of Structures I (Arch 366, 367)
Structure Systems (Arch 372, 373)
Theory of Structures II
(Arch $465 \mathrm{G}, 466 \mathrm{G}, 467 \mathrm{G}$ )
Theory of Structures III (Arch 565, 566, 567)
construction process
Building Materials (Arch 327)
Introduction to Real Estate (Fin 341)
Real Estate Finance (Fin 440)
Construction Communications
(Arch 417, 418, 419)
Structural Planning (Arch 472 G)
Architecture Workshop (Arch 408)
Advanced Structural Planning (Arch 506)
physical context
Site Analysis (LA 361)
Ecological Implications in Design
(Arch 454 G)

## CULTURAL CONTEXT

Human-Environment Relations (Arch 451 G)
Multi-family Housing (Arch 407)
Architectural Education (Arch 414 G)
Architectural Practice (Arch 429 G)
Settlement Patterns
(Arch $413 \mathrm{G}, 432 \mathrm{G}, 433 \mathrm{G}$ )
Architecture as Form (Arch 435 G)
Critical Issues in the Urban Environment (Arch 441 G)

## All Urban and Regional Planning courses

All Art History courses except those
satisfying University group requirements
Introduction to Law (BE 226)
Urban Geography (Geog 435, 436)
Urbanization and the City (Soc 442)
Regional and Urban Economics
(Ec 414, 415, 416)
Environmental Psychology (Psy 461)
(b) Design Area, 50 credit hours: ( 10 credits Arch 180, 30 credits Arch 380, 10 credits Arch 480G). Architectural Design (Arch 380 G), Advanced Architectural Design (480G). Arch 180 is usually taken for two terms during the first year of the program, and Arch 380 is taken two out succeeding three years and Arch 480 is taken during the final year. Students who are eligible for Arch 380 may select from a range of over fifteen stuclio offerings.
(c) Subject Area, a minimum of 70 credit hours from the approved Lists A and B, below. At least 54 credit hours must be courses offered by the Department of Architecture, List A. Coursework in all seven of the groups is encouraged, and should be engaged in by someone intending to enter architectural practice. Arch 232 (introcluction to design development media) must be taken with Arch 180.

List B constitutes coursework in related areas outside the Department. Basic courses in other departments can be taken to satisfy University group requirements and are not included on List B. Subject credit for courses on List B is approved only for the time period covered by the current catalog or as specifically approved by the faculty.
(i) Additional courses may be approved for Subject credit by the faculty prior to enrollment. The faculty will update List B each term, so students should consult the list of currently approved List B courses posted outside the Architecture Department office.
(ii) Interconnections, Search, and Design courses are not Subject Area courses. Coursework in Arch 401, 403, $405,406,408,409,501,505$, and 506 , not on List A, must be approved on an individual basis to count as Subject credit.
(iii) Clearly, many courses on list B overlap several groups; they are listed in only one for convenience.
(d) Electives Area, 42 credit hours.

The following special courses may be aproved by the Department of Architecture facuty as satisfying Interconnection, Subject, Design, or Elective areas of study : Research (Arch 401, 501), Thesis (Arch 403, 503), Reading and Conference (Arch 405, 505), Special Problems (Arch 406, 506), Seminar (Arch 407, 507), Workshop (Arch 408), Practicum (Arch 409), Experimental Course (Arch 410).
Majors may take any graded course on either a pass-differentiated (graded) or pass-undifferentiated (ungraded) basis.

Both the Bachelor of Architecture and the Master of Architecture (first professional degree) programs are accredited by the National Architectural Accrediting Board.

## Graduate Studies

There are three programs of gracluate study in architecture at the University of Oregon:
The Class 8 Program. (Option I) leads to the Master of Architecture degree. This program normally takes from four to six terms and includes about six new students each year. Applicants must have a professional degree in architecture.
The Class 8 Program (Option IIA and IIB) also leads to the Master of Architecture degree. The Option IIA progrann is for students who have a 4 year nonprofessional degree in Architecture or Environmental Design. This degree usually can be completed in 6 to 7 terms. The Option IIB program normally takes ten terms and includes about thirty new students each year. Applicants must have an A.B. or B.S. degree. Transfer credit may be given to students who have had special experience in architecture. The minimum residency requirement for this program is 6 terms.
The Class 3 Program (Option III) is a special program for those occasional people who do not have a college degree, but who by the combination of achievement in professional experience, age, previous academic and or teaching experience and a significant graduate study goal would be more appropriately placed at the graduate than undergraduate level. A professional license in architecture would be good evidence of candidate achievement. The Class 3 program is a conditional program ; after the first year, if satisfactory progress is being made, Class 3 students would normailly transfer to the Class 8 Option I program.

A more detailed description of the Class 8, Option I and II, A and B programs follows:
Class 8 (Option I). This progran should be understood as an opportunity, beyond that normally offered by fiveyear professional degree architectural programs, to study architectural subjects of significance. Option I students are expected to become aware quickly of the people and resources of the department and the variety of research and creative work in progress, then to initiate and develop personal study programs which have a close
relation to that work. These individual study programs would culminate in Master of Architecture theses, which would synthesize and clearly conmmunicate the work done. A typical Master study program would focus on one or several significant architectural topics and would normally rely heavily on the study method of design probing. It would draw upon professional and general University courses, formal and informal reading courses and seminars, continuous personal consultation with members of the faculty, and other investigation growing out of a student's initiative. Students might carry on their own funded researcl, assist in the preparation of coursework, teach in an assisting capacity, prepare exhibits and demonstrations and give lectures.

Students in the Option I program are required to complete 45 credit hours of work in graduate level courses; 30 of the 45 hours must be done in the Department of Architecture. 9 of the 45 graduate hours must be 500 desiguated courses.
Ordinarily, Option I graduate students are required to begin their work in the fall term.

Class 8 (Option IIA and IIB). This program enables persons with degrees in fields other than architecture, and persons with non-professional architectural degrees, to obtain the Master of Architecture degree as a first professional degree. Option II students must complete the hours of Interconnection, Design and Subject work ( 129 total hours) normally required for the undergraduate Bachelor of Architecture degree. They must also satisfy the University requirement of 45 graduate credits for the Master's Degree, 30 of which must be taken in the Department of Architecture. Consequently, the program is longer and less flexible than the Option I program. Normally the Option IIA can be completed in 6 terms and the Option IIB program is completed in 10 quarters (three and onethird academic years), but persons with previous experience in architecture may reduce the length of their program to a minimum of 6 terms depending on the kind and amount of previous experience.
Also, the following substitutions may be made in the requirements for the Option II program. (Substitutions apply to work done after students have initiated programs at the University of Oregon.)
(a) In lieu of 9 hours Interconnection credit, Option II students may substitute other appropriate coursework.
(b) Option II A and B students may
substitute other appropriate coursework for up to 5 of the required 50 hours of Design credit.
(c) Option II A and B students may substitute other appropriate coursework for up to 15 of the required 70 hours of Subject credit.
(d) Option IIA students with special study interests may become eligible to transfer into the Option I program.

All graduate students are required to begin their work in the fall term; the department does not have a late admissions program.

Departmental Brochure. The department has prepared a detailed description of the graduate program which is available to prospective students and may be requested by writing directly to Graduate Secretary, Department of Architecture.

Deadlines for Applications. Applications should be postmarked by February 1. Notice of decisions on applications will be mailed on April 1.

Applications from Students who are Members of Minority Groups. In keeping with general University of Oregon policy, applications from minority-group students are encouraged.

## Architecture

## Interconnection

## Arch 221, 222, 223. Fundamental Issues

 in Environmental Design. 3 credit hours each term. An open forum for presenting timely and significant issues basic to all the environmental design fields. Introduction both to the fields of environmental design and to the School and faculty of this area. Issues change from year to year; teams of faculty offer a series of short courses within the context of each term-long course. A required course for Architecture majors ; students are encouraged to take the set of three in sequence. The issues, by brief topical title, to be discussed this year are: Beauty, Style, Place, Change/stability, Nature, Community/ individual, Value, Power, Technology, Lifestyle, Order, Design.
## Design

Arch 180. Architectural Design. 5 credit hours. Execution of design projects and exercises intended to familiarize the student with fundamental concepts of environmental design. Students are encouraged to develop habits of problem formulation and sound bases for value judgments; the release of the student's potential creative capacities is a primary concern of the course. May be repeated for credit. A no-grade course. Arch 380. Architectual Design. 5 credit hours. Design projects requiring comprehensive and integrative study. A wide range of project options varying in complexity and in central focus are identified each term. Individual criticism, group discussions, lectures, and seminars by visiting specialists, review of projects. Prerequisite : Arch 180. May be repeated for credit. A no-grade course.

Arch 480. Advanced Architectural Design.
(G) 5 credit hours. Two consecutive terms of advanced level design studio allowing in-depth engagement of complex design projects and design development beyond that normally possible in less advanced studios. Required course. This studio counts toward the completion of the required 50 hours of design. Prerequisite: 35 credit hours of Architectural Design (Arch 180 and 380).

## Arch 506. Special Problems: Design. 5

 credit hours. Graduate level design projects requiring comprehensive and integrative study. May be repeated for credit. A no-grade course.
## Subject

design theory and procedure
Arch 311. Design Proces and Method. 3 credit hours. Introduction to concepts of environmental design strategies and tactics. Exploration of relationships between theory and practice in traditional and emerging methods of design decision-making. Prerequisite: One term of Arch 180. A no-grade course.
Arch 411. Research Methods. (G) 3 credit hours. Introduction to research methodology, with special emphasis on problems in environment research. A no-grade course. Arch 416. Spatial Composition and Dynamics. (G) 3 credit hours. Study of architectural space as a means by which people measure their existence and expand their awareness. Exploration of methods for analyzing and means for generating spatial or ganizations with particular reference to human experience.
Arch 451. Experiential Considerations in Design. (G) 3 credit hours. The study of experiential considerations as a theory base for architecture design; and the study of places that embody response to experiential considerations.

## architectural media

## Arch 232. Introduction to Design

Development Media. 4 credit hours.
Introductory experience in the use of basic media types within the media families: Drawings, Models, Pictures, and Words. Engages these media as they are useful in the following states of design development : beginnings (issue base, criteria, precedents) ; contextual analysis ; development of project components; development of project organizational structure ; testing design proposals. Students taking Arch 180 must take this course during their first term of Arch 180. This requirement may be waived for students with media experience equal to that described above, subject to approval by Architecture Department Head. Course includes both lectures and studio work.

## Arch 333, 334, 335. Media for Design

Development. 3 credit hours. Applied study of specific media types within the media families: Drawings, Models, Pictures, and words, as they are useful in the following stages of design development : beginnings (issue base, criteria, precedents) ; contextual analysis ; development of project components; development of project organizational structure ; testing design proposals. Prerequisite : Arch 232.
Arch 337. Color Theory and Application for the Built Environment. 3 credit hours. A study of factors involved in developing an understanding of and criteria base for use of color in the built environment including principal color systems, methods of color harmony, effects of visual phenomena, and
various psychological, cultural, and historic implications. Prerequisite : 10 credit hours of Arch 180 or consent of instructor.
Arch 436. Adyanced Design Development Media. 3 credit hours. An advanced-level examination of issues in media as they occur within the following, or similar, stages of design development : beginnings; contextual analysis ; project components ; project organizational structure; test or "checking out" design proposals. Opportunity to deal with media or media issues that fall outside the above framework. Prerequisite : 9 credit hours of other work in Architecture media.

## ENVIRON MEN TAL CONTROL SYSTEMS

Arch 321, 322. Environmental Control Systems. 3-4 credit hours each term. Studies of sound, light, heat, moisture, air motions, fluids, electricity ; their characteristics in both natural and people-altered states, their effects upon human behavior, the mechanical equipment by which they are manipulated, and their influence upon the environmental design process and product. Lectures and calculation problems are the same for both the 3 and 4 credit options. In addition, several major projects are required each term for the 4 hour option. A working knowledge of algebra, trigonometry, and basic physics is necessary. Open to nonmajors. Arch 323. Environmental Control Systems. 4 credit hours. Further investigation of Arch 321,322 subject matter through the design of the control systems. Prerequisite : Arch 321, 322.

## structural theory

Arch 365. Introduction to Structures. 4 credit hours. Development of the basic understanding of the behavior of structural elements and systems ; model analysis of structural phenomena; study of force systems.
Arch 366, 367. Theory of Structures I. 4 credit hours each term. Application of mathematics and mechanics to the design of building structures of wood and steel construction. Analysis of simple elements and systems; the relationship of structural design to architectural design. Prerequisite : Arch 365 ; mathematics through trigonometry and physics recommended.
Arch 373. Structure Systems. 3 credit hours. Behavior of structure systems and their influence on architectural space and form ; nonmathematical ; creative development of structure concepts through model construction and observation of natural and built structures; evolution, the inherent order, transformation of physical structure. Prerequisite : Arch 365.
Arch 465, 466, 467. Theory of Structures II. (G) 3 credit hours each term. The theory, design, communication, and construction processes of reinforced-concrete building systems. Prestressed-concrete design principles, effects of wind and seismic forces on structures. Prerequisite : Arch 366, 367.
Arch 565, 566, 567. Theory of Structures
III. 4 credit hours each term. Advanced studies in structural-design methodology and criteria; intensive coverage of theoretical analysis; design and evaluation of structural systems. Prerequisite : Arch 465, 466. 467.

## CONSTRUCTION PROCESS

Arch 327. Building Materials. 3 credit hours. Study of traditional, new and experimental materials from manufacture to methods of erection ; special concern for the physical properties and behavioral characteristics of the material in place, and its impact on building form. Consideration of building
materials as elements in environmental context and study of implications for resource conservation. Prerequisite: One term of Arch 180.
Arch 351. Construction Processes. 3 credit hours. Analysis of distinctive construction procedures; techniques, materials, and management operations.
Arch 417, 418, 419. Construction Communications. 3 credit hours each term. Examination of the information required for communication of the construction processes in building. Methods and techniques of construction, contract documents including working drawings and specifications, cost-estimating, and administration of the project. May be taken out of sequence.
Arch 472. Structural Planning. (G) 3 credit hours. An introduction to structural planning, design, and comprehensive evaluation of building design through consideration of related disciplines. The study of operationssearch techniques. Prerequisite : Arch
365, 366, 367.
Arch 408. Workshop. (G)
Architecture. 2-4 credit hours. Investigation through experimental construction and demonstration of full-scale mockups representing three dimensional architectural space; visual and tactile effects, light and color influences ; impact on human behavior ; material and energy consideration.

## Arch 506. Special Problems.

Advanced Structural Planning. 3-5 credit hours. For fifth-year and graduate students who have had Arch 472, Structural Planning, and who wish to do further study and research in the following areas of interest: (1) structural systems design and analysis; (2) functional, technological, architectural and financial contexts; (3) integrated design and planning methods and applications; (4) evaluation system and method. A no-grade course.

## PHYSICAL CONTEXT

Arch 454. Ecological Implications in Design. (G) 3 credit hours. Some of the interrelationships of environment, tangible and nontangible), culture (with its concomitant technologies) and consequent social. organizations. Speculation concerning viable alternatives for the environmental designer. Prerequisite : Arch 221, 222. 223; recommended Bi 272 or Bi 370 or Geol 321.
cultural context
Arch 441. Critical Issues in the Urban
Environment. (G) 3 credit hours. Focus on the city as a special human institution for supporting social existence, cultural amenity, and individual growth. An investigation of different urban settings in which the tension between individual choice and communal responsibility is sharply reflected in physical form. Seminar and discussion based on readings in literature, urban design, planning, and politics. Open to nonmajors.
Arch 414. Architectural Education. (G) 3 credit hours. Comparative study of methodologies in architectural education; examination of existing curricula and identification of new opportunities for curricular development. A no-grade course.
Arch 429. Architectural Practice. (G) 3. credit hours. Problems and opportunities in professional practice explored through an investigation of diverse modes of operation together with the relationships between users, clients, designers, contractors, and regulating agencies. Case studies and seminars with visiting practitioners. A no-grade course.
Arch 431, 432, 433. Settlement Patterns.
(G) 3 credit hours each term. Investigates
the three-dimensional structuring for settlements and cities as human responses to physical context, cultural forces, and changing opportunities. Studies of the implication of ideal models and utopian concepts and the realization of place in the vernacular.
Arch 435. Architecture as Form. (G) 3 credit hours. This course involves architectural analysis and comparison as tools for the architect using historical and contemporary works as examples in presentation on site and context ; use, space, and the room ; connection and circulation; material and form; structure and form ; environmental control ; light and color ; and compositional qualities of balance, scale, and rhythm.
Arch 457. Social and Behavioral Factors in Design. (G) 3 credit hours. Introduction to the study of the structural patterns of people's interactions with the physical settings of everyday activities. Identification of environmental functions and the range of relevant analytical concepts and approaches available. Application of social science paradigms and research to issues in architecture design. Exploration of ways of introducing social and behavioral information in program, design, and evaluation processes.

## Arch 407. Seminar. (G)

Multi-Family Housing. 3 credit hours. Survey of multi-family housing during the postWorld War II period from the point of view of the environmental designer ; the ways in which social, economic, political, geographical, historical, and technological factors interact and influence both problem definition and design solutions. Prerequisite : minimum of two terms of design studio.

## elective

Arch 200. SEARCH. 1-3 credit hours.
Arch 400. SEARCH. 1-3 credit hours.
Arch 401. Research. Credit hours to be arranged.
Arch 403. Thesis. Credit hours to be
arranged. Student may propose studies in Interconnection, Design, or Subject areas. Faculty approval required. A no-grade course. Arch 405. Reading and Conference. Credit hours to be arranged.
Arch 406. Special Problems. (G) Credit hours to be arranged.
Arch 407. Seminar. (G) Credit hours to be arranged.
Arch 408. Workshop. (G) Credit hours to be arranged.
Arch 409. Practicum. (G) Credit hours to be arranged.
Arch 410. Experimental Course. (G) Credit hours to be arranged.
Arch 501. Research. Credit hours to be arranged. No-grade course.
Arch 503. Thesis. Credit hours to be arranged. Open only to Master's degree candidates. Faculty approval required. A no-grade course.
Arch 505. Reading and Conference. Credit hours to be arranged.
Arch 506. Special Problems. Credit hours to be arranged.
Arch 507. Seminar. Credit hours to be arranged.
Arch 510. Experimental Course. Credit hours to be arranged.

## Business and Construction

Business and construction is a five-year program administered jointly by the

School of Architecture and Allied Arts (AAA) and the College of Business Administration (CBA) to prepare students for professional careers in housing, construction, and related fields. Students completing the requirements of this program and the general CBA requirements receive a bachelor degree from the College of Business Administration.

The Business and Construction Program prepares students to deal with the central significance of impementation in the construction industry and in our society, and develops skills in the employment of technology to achieve fundamental human purposes. There are three options in the program; focusing on the development, management, and materials distribution aspects of construction. The urban development option prepares the students for careers as builders, developers, and real estate specialists, and as public employees to deal with builders. The construction management option emphasizes the more technical aspects of construction to qualify persons to write job specifications, to do cost-estimating, and to supervise construction with and for architects, engineers, and contractors. The materials distribution option deals with the production and marketing of products such as wood, concrete, structural steel, and other building materials.
The Business and Construction student must complete 225 credit hours divided equally among Liberal Arts, AAA, and CBA courses.
Degree Requirements: (a) Credit hours in general University courses (not AAA or CBA), a total of 75 . (b) School of Architecture and Allied Arts courses, a total of 75 credit hours, as follows: architecture core; 44 credit hours ; architecture option, 31 credit hours. (c) College of Business Administration courses, a total of 75 credit hours, as follows: business core, 33 credit hours ; business option requirements, 15 credit hours; business electives, 27 credit hours.

Details of specific requirements may be obtained from either the School of Department of Architecture, or the College of Business Administration. Architecture and Allied Arts, Note: This program has been cancelled. Beginning fall term, 1978, no new enrollments will be accepted.

## Interior Architecture

The curriculum in interior architecture leading to the degree of Bachelor of

Interior Architecture is a five-year program. Because of the diversity of opportunities in the profession, the program is designed to allow students and their adviser considerable flexibility in the establishment of study sequences which satisfy individual interests and needs. The flexibility of the program allows students to extend their study to the allied disciplines of architecture, landscape architecture, urban planning, art history, and fine and applied arts.

The program in interior architecture engages the student in all phases of interior planning. Emphasis is placed on problem-solving and creative development as related to the proximate environment. Individual criticism is supplemented by lectures and reviews by members of the design staff. The student works in close proximity with the students and instructors in architecture and landscape design. The program includes field trips to acquaint the students with outstanding examples of current professional work in interior architecture. Opportunities are provided for collaboration on design problems with students in other fields in the arts. Students transferring from other institutions are encouraged to submit a portfolio of their work in order to aid design course placement. It is recommended that the student participate in two annual interiordesign field trips prior to graduation.

Because interest in the program exceeds the capacity of the Department, prospective students are advised to make early application. New students are admitted into the program only in the fall term. Transfer students should be advised that an accelerated program wil not normally be possible. Consult the department for advice on enrollment policies and application deadlines.
Degree Requirements: Candidates for the Bachelor of Interior Architecture degree must satisfy the following requirements, totaling 220 credit hours :
(1) General University requirements of 49 credit hours, distributed as follows: (a) group requirements, 36 credit hours in Arts and Letters. Social Sciences, and Sciences; (b) English composition, 6 credit hours; (c) physical education, 5 credit hours; (d) health education, 2 credit hours.
(2) Major program requirements of 171 credit hours, distributed as follows : (a) Interconnections, 9 credit hours; Design Area, 60 credit hours; Subject Area, 70 credit hours; Elective Area, 32 credit hours.
(3) Specific Program Requirements. The program requires that students engage in all four of the following areas:
(a) Interconnections, 9 credit hours including: Environment and Communication (Arch 221), Environment and Cultural Milieu (Arch 222), Environment and Life Support (Arch 223).
(b) Design Area, 60 credit hours including : two terms Architectural Design (Arch 180) ; Creative Problems in Interior Design (Arch 288) ; six terms of Interior Design (Arch 388) ; Furniture Design (Arch 425) ; two terms of Fifth-Year Thesis (Arch 488).

Up to two terms of Arch 380 Architectural Design may be substituted for Arch 388. Furniture Design (Arch 426) may be substituted for one term of Arch 388. Enrollment in design courses is limited to one per term.
(c) Subject Area, a minimum of 70 credit hours. This area is divided into three groups:
Group I, courses which are required by the program: Survey of Interior Design (Arch 224) ; Introduction to Architectural Media Studies (Arch 333 ) ; Materials of Interior Design (Arch 330, 331 ) ; Furniture and Accessories (Arch 424) ; Working Drawings, Interiors (Arch 462, 463) ; History of Interior Architecture (ArH $451,452,453$ ).
Group II, 9 credit hours selected from the Art History program.
Group III, a minimum of 31 credit hours selected from the following: Interior Architecture : Color Theory and Application for the Built Environment* (Arch 337) ; Specification Documents (Arch 449) ; Working Drawings (Arch 464) ; Office Practice (Arch 530). Architecture: Architectural Media (Arch 334-335) ; Environmental Control Systems* (Arch 321, 322, 323) ; Design Process and Method (Arch 311) ; Research Methods (Arch 411) ; Spatial Composition and Dynamics (Arch 416) ; Experiential Considerations in Design (Arch 451) ; Introduction to Structures* (Arch 365) ; Structure Systems (Arch 372, 373). Landscape Architecture : up to 6 credit hours from the Landscape Subjects program. Urban Planning: Survey of Regional and Urban Planning (URP 350). Art History: up to 9 credit hours in courses different from those used to satisfy Group II. Fine Arts: up to 15 credit hours from the various areas.

* These courses are especially recommended by the Foundation for Interior Design Education Research.
(d) Elective Area, 32 credit hours : students are encouraged to select a mix of departmental and general Univer-
sity courses throughout the five-year course of study.

The following courses may be developed and approved for credit in Interconnection, Subject, Design, or Elective areas: Research (Arch 401, 501) ; Reading and Conference (Arch 405, 505) ; Special Problems (Arch 406, 506) ; Seminar (Arch 407, 507) ; Workshop (Arch 408) ; Practicum (Arch 409).

Majors may take any graded courses on either a pass-differentiated
(graded) or pass-undifferentiated (ungraded) basis.

The curriculum in interior architecture is accredited by the Foundation for Interior Design Education Research.

## Graduate Studies

There are two programs of study in interior architecture at the University of Oregon:

The Option IV Program leads to the Master of Architecture with a special emphasis in Interior Architecture. This program normally takes from four to six terms. Applicants must have a professional degree in Interior Architecture.

The Option $V$ Program leads to the Bachelor of Interior Architecture. This program normally takes nine terms. Applicants must have an A.B. or B.S. degree. Option V students with special study interests may become eligible to transfer into the Option IV program. Both Option IV and V students are required to begin their work in the fall term. Details of the Option IV and V programs follow:
Option IV (Master of Architecture): This program should be understood as an opportunity, beyond that normally offered by five-year professional degree architectural programs, to study architectural subjects of significance. Option IV students are expected to become quickly aware of the people and resources of the department and the variety of research and creative work in progress, and then to initiate and develop personal study programs which have close relation to that work. These individual study programs normally culminate in Master of Architecture theses which synthesize and report the work done. A typical Master's study program focuses on one or several significant architectural topics and usually relies heavily on the study method of design probing. It draws upon professional and general University courses, formal and informal reading courses and seminars, continuous personal consultation with members
of the faculty, and other investigation growing out of a student's initiative. Students may engage in their own funded research, assist in the preparation of courses of instruction, do assistant teaching, prepare exhibits and demonstrations, and give lectures.
Students in the Option IV program are required to complete 45 credit hours of work in graduate courses; 30 of the 45 hours must be done in the Department of Architecture.

## Option V (Bachelor of Interior

 Architecture): The Option V program provides students with work leading to the first professional degree, the Bachelor of Interior Architecture. Because Option V students must complete the normal hours of Interconnection, Design, and Subject work ( 129 total credit hours) required by that degree, the program is longer and less flexible than the Option IV program. In some cases, transfer credit nay be given for other courses completed or for special experience in the architectural field.The following substitutions may be made in the requirements for the Bachelor of Interior Architecture degree (Substitutions apply to work done after students have initiated program on Option V status at the University of Oregon) :
(a) In lieu of 9 credit hours in Interconnection, Option V students may substitute work in other appropriate courses.
(b) Option V students may substitute work in other appropriate courses for up to 5 of the required 50 hours of Design credit.
(c) Option V students may substitute work in other appropriate courses for up to 15 of the required 70 hours of Subject credit.
Applications for Option IV and V students should be received in the Department by February 1 . Notice of decisions on applications will be mailed on April 1.

## Interior Architecture

Design
Arch 288. Creative Problems in Interior Design. 5 credit hours. A series of creative problems in interior design relating to the planning processes by which interior spaces and forms are studied and executed. Prerequisite: Arch 224 and Arch 180. A no-grade course.
Arch 388. Interior Design. 1-8 credit hours any term. A series of creative problems in interior design; intensive analysis of design; methods of problem solution; individual criticism, review of design projects; group discussion and field trips. Prerequisite: Arch 288, Arch 333. A no-grade course.

Arch 425, 426. Custom Cabinet and Furniture Design. (G) 5 credit hours each term. Projects involving the design of custom furniture, preparation of detailed shop drawings, shop procedure. Prerequisite : Arch 424, and 15 credit hours in Arch 388 or Arch 380. Open to nonmajors with consent of instructor A no-grade course.
Arch 488. Interior Design Terminal
Project. 5 credit hours. Student-initiated studies in interior design for the terminal project. Emphasis on comprehensive and integrative study. Two terms required. Prerequisite : 20 credit hours in Arch 388. A no-grade course.
Subject
Arch 224. Survey of Interior Design. 2 credit hours. A study of the scope, aims, principles, and techniques of interior design, intended to provide an introduction to the professional field. Open to nonmajor students with consent of instructor.

## Arch 330, 331. Materials of Interior

Design. 3 credit hours each term. Critical survey and study of the properties, manufacture, and application of materials used in interior design ; field trips to supply sources. Open only to professional majors.
Arch 337. Color Theory and Application for the Built Environment. 3 credit hours. A study of factors involved in developing an understanding of and criteria base for use of color in the built environment including principal color systems, methods of color harmony, effects of visual phenomena, and various psychological, cultural, and historic implications. Prerequisite : 10 credit hours of Arch 180 or consent of instructor.
Arch 424. Furniture and Accessories. (G) 3 credit hours. Analysis of standard lines of furniture and accessories; emphasis on design and its development, materials, methods of manufacture and distribution; furniture construction and techniques of shop drawing. Open to nonmajors with consent of instructor
Arch 449، Specification Documents in
Interior Design.(G) 1 credit hour. Information required in preparing specification documents as related to the process of construction and furnishing of interior space.
Arch 462, 463. Working Drawings in Interior Architecture. 4 credit hours each term. Preparation of working drawings for projects in interior design. For Professional majors only.

## Elective

Arch 200. SEARCH. 1-3 credit hours.
Arch 400 . SEARCH. 1-3 credit hour.
Arch 401. Research. Credit hours to be arranged.
Arch 405. Reading and Conference. Credit hours to be arranged.
Arch 406. Special Poblems. (G) Credit hours to be arranged.
Arch 407. Seminar. (G) Credit hours to be arranged.
Arch 408. Workshop. (G) Credit hours to be arranged.
Arch 409. Practicum. (G) Credit hours to be arranged.
Arch 410. Experimental Course. (G) Credit hours to be arranged.
Arch 501. Research. Credit hours to be arranged. No-grade course.
Arch 505. Reading and Conference. Credit hours to be arranged.
Arch 506. Special Problems. Credit hours to be arranged.

Arch 507. Seminar. Credit hours to be arranged.
Arch 510. Experimental Course. Credit hours to be arranged.
Arch 530. Office Pactice (Interior). 2 credit hours. Office procedure for the interior designer in private practice ; trade contracts, discounts, interprofessional relations; sources of materials.
Arch 588. Advanced Interior Design. 1-12 credit hours any term. Studio-based investigation of special aspects of interior design. Prerequisite : fifth-year or graduate standing; consent of instructor. A no-grade course.

## Landscape Architecture

## Faculty

Jerome Diethelm, M.L.Arch., Department Head, Professor of Landscape Architecture (land-planning research, site planning and design). B.Arch., Washington, 1962 ; M.L.Arch., Harvard, 1964 ; Reg. Architect, Reg. Landscape Architect.
Eugene Bressler, M.L.Arch., Associate Professor of Landscape Architecture (site analysis, land-use planning, computer graphics). B.L.Arch., Syracuse, 1968 ; M.L.Arch., Harvard, 1970. Richard Britz, M.A., Assistant Professor of Landscape Architecture (educational psychology and environmental education). B.Arch., Kansas, 1965. Jack Donis, B.L.A., Visting Lecturer of Landscape Architecture (irrigation design). B.L.A., Oregon, 1969.
Howard Foster, M.L.Arch., Visiting Assistant Professor of Landscape Architecture. B.S., California, Berkeley, 1969 ; M.L.A., Oregon, 1975.
Kenneth I. Helphand, M.L.A., Assistant Professor of Landscape Architecture (landscape history and perception ). B.A., Brandeis, 1968 ; M.L.A., Harvard, 1972.
Ronald J. Lovinger, M.L.A., Professor of Landscape Architecture and Architecture (planting design theory, landscape transformation). B.F.A., Illinois, 1961 ; M.L.A., Pennsylvania, 1963.
Joseph D. Meyers, M.S., Assistant Professor of Landscape Architecture (geo-environmental analysis). B.S., 1949, M.S., 1952, Oregon.
Robert K. Murase, B.L.A., Assistant Professor of Landscape Architecture (design, site development, characteristics of Japanese landscape form). B.L.A., California, Berkeley, 1963. Wesley A. Murray, M.L.Arch., Assistant Professor of Landscape Architecture (site analysis, planning, plant communities). B.A., Heidelberg, Ohio, 1961 ; M.L.A., Pennsylvania, 1970.

John Nelson, M.Phil., Visiting Associate Professor of Landscape Architecture. B.L.A., Oregon, 1970 ; M.Phil., Edinburgh, 1973.
Damon Ohlerking, M.L.Arch., Assistant Professor of Landscape Architecture (planting design, plants and community development). B.S., Iowa, 1968 ;M.L.A., Iowa, 1976.
Robert Perron, M.L.A., Visiting
Associate Professor of Landscape
Architecture. B.L.A., Oregon, 1960 ;
M.L.A., Harvard, 1961.

Glenda Fravel Utsey, M.L.A., Visiting Assistant Professor of Landscape

Architecture (design, settlement patterns). B.Arch., Oregon, 1971 ; M.L.A., Oregon, 1977.

## Faculty Emeriti

Fred A. Cuthbert, M.L.D., Professor Eneritus of Landscape Architecture and Urban Planning. A.B., 1926, M.L.D., 1928, Michigan ; at Oregon since 1932.
George S. Jette, B.L.A., Professor Emeritus of Landscape Architecture (recreational planning and design).
B.L.A., Oregon, 1940 ; at Oregon since 1941.

Wallace M. Ruff, M.S., Professor Emeritus of Landscape Architecture (research, experimentation, introduction of plants ). B.S., Florida, 1934 ; M.S., California, 1950 ; at Oregon since 1952.
Graduate Teaching Fellows
Ann Bettman, B.A., 1967, Boston. Richard Glanville, A.B., 1972, Davis. Hank Lawrence, B.A., 1968, Yale. Ron Matela, M.F.A., 1972, California Institute of the Arts.
Ian McClure, B.Arch., 1973, Edinburgh.
Barbara Oakrock, B.Arch., 1975, Pratt. Jay Rood, B.L.A., 1974, Oregon.

## Undergraduate Studies

Landscape Architecture is an environmental discipline and profession of broad scope whose central concern is the wise use of land.

Land is earth, air, water, the base of cultures and the home of life. The value base for landscape architecture includes earthly stewardship, the search for appropriate technologies, and for community processes which yield healthy social change.

As a profession it includes ecologically based planning activities and the analysis of environmental impact as well as the detailed development of land and sites of all sizes and uses. As an academic discipline, it provides a unique opportunity for personal development through environmental problem- and project-oriented study.

The programs in landscape architecture emphasize the making of richly supportive physical places, beautiful in their profound understanding of human need and its ecological context. Planning and design are seen as processes for understanding the complex interdependencies between the biophysical and cultural landscapes.

The curriculum in landscape architecture, leading to the degree of

Bachelor of Landscape Architecture, is a five-year program which combines a general preparation in the arts and sciences with a focus on environmental relations. The program hopes to produce a literate citizen and a graduate capable of playing a central, professional role in the evolving landscape.

Opportunities are provided for collaboration on planning and design problems with students in architecture, urban planning, geography, biology, sociology, recreation and park management, and the fine arts, in recognition of the integrated, comprehensive nature of environmental planning and design.

The curriculum represents a recommended path toward the degree. It is expected to vary through advisement and to respond to the interests, goals, and previous experience of individual students. The options and departmental electives offered reflect both the need to provide a wide range of environmental subject material and to introduce the rapidly expanding spectrum of career areas within the profession. Emphases include ecological and resource analysis; land conservation and development ; leisure and recreational planning and design; private office professional practice; public agency professional practice; environmental impact assessment ; environmental research.

The undergraduate program provides a balanced exposure to the many facets of landscape architecture with the expectation that specialization will occur at the graduate level and in the internship programs.

Four interrelated areas structure the undergraduate curriculum:
(1) The Planning and Design Program. This is a series of studio courses on the development and communication of solutions to site and other environmental problems, especially through specific physical design proposals. It is also concerned with the physical-spatial implications of planning policies and management policies and programs. Tutorially oriented studio work is the integrative heart of the curriculum.
(2) The Subjects Program. Seven subject areas are included, believed essential foundations to integrative work in the planning and design program. These include: (a) landscape architectural technology; (b) plant materials; (c) history and literature of landscape architecture ; (d) interconnection and environmental awareness ; (e) media and communication; (f) planning; ( $g$ ) fine arts. Course work in the above areas, offered through various departments, is provided in a core and
option format which encourages the student to participate through advisement in the structuring of an educational program
(3) The Supportive-Subjects Program. Providing supplementary course work in technical, topical and research areas of the profession, it also includes courses relating to special faculty interests and course work reflecting contemporary career opportunities in landscape architecture.
(4) The Elective Program. The program, which includes the general requirements of the University, provides for wide personal choice in the structuring of course work in the humanities, arts, and sciences.

Students planning to major in landscape architecture may prepare by taking beginning studies in the following areas:
(1) Visual language skills. Courses in drawing, painting, photography, cinematography, design, art history, and related subjects will be helpful in developing perceptual skills and the ability to explore and communicate ideas graphically.
(2) Problem-solving. Courses in philosophy, mathematics, and other natural sciences will aid in the development of analytical skills.
(3) Ecological awareness. Courses in ecology, biology, botany, geology, and geography will help begin the long process of understanding the complex interrelationships and interdependencies of man and the environment.
(4) Human behavior. Courses in psychology, sociology, history, government, and related subjects, which help explain man's needs, values, attitudes and activities, will be useful in preparing for the design of physical places.

Students planning to transfer into the department should follow the above guides during their first year of study. They may expect to transfer without loss of time or credit into the second year of the B.L.A. program.

Degree requirements total 220 credit hours, distributed as follows:
(1) Planning and Design Program, 71 credit hours: 13 studios required. 1st year: 2 studios (Arch 180); 2nd year: 2 studios (L.A. 289) ; 3rd year : 3 studios (L.A. 389) ; 4th year: 3 studios (2, L.A. 489, 1 choice) ; 5 th year : 3 studios (1, L.A. 589, 1, L.A. 506, comp. project, 1 choice).
Arch 380 (Arch. Design), LA 409 (Practicum) and LA 408 (Summer Design Workshop) may be substituted for required studios with adviser's approval.
(2) Subject Program 66 credit hours:
(a) Landscape Architectural Tech-
nology, core courses, 12 credit hours. Understanding Landscapes (LA 360) ; Site Analysis (LA 361) ; Site Development I (LA 362) ; Site Construction I (LA 366). Optional courses include: Site Development II (LA 459) ; Site Construction II (LA 460) ; Construction Communication (LA 461) ; Introduction to Structures (Arch 365), (plus Arch. structure sequence).
(b) Plant Materials, core courses, 18 credit hours: Plant Communities and Environments (LA 226) ; Plant Materials (LA 326, LA 327, LA 328) ; Landscape Maintenance I (LA 357) ; Planting Design Theory (LA 431). Optional courses include: The Garden (LA 432) ; Landscape Maintenance II (LA 358) ; Systematic Botany ( Bi 438 ) ; Plants for Interiors (LA 483).
(c) History, Theory and Literature of Landscape Architecture, 6 credit hours min. History of Landscape Architecture (ArH 447, 448) ; Landscape Perception (LA 490G) ; The Contemporary American Landscape (LA 491G).
(d) Interconnection Courses, 8 credit hours: Introduction to Landscape Architecture (LA 225). Optional courses include (choose any two) Fundamental Issues in Environmental Design, (Arch 221, 222, 223 ).
(e) Media Courses, 7 credit hours: Introduction to Design Development Media (Arch 232) ; Media for Design Development (Arch 333, 334, 335) ; Advanced Design Development Media (Arch 436) ; Special Problems in Delineation (LA 406).
(f) Planning Courses, 9 credit hours (UP 350 recommended; a list of additional current offerings is maintained in the department office).
(g) Fine Arts, 6 credit hours. (3) Supportive-Subjects Program: Reading and Conference (LA 405, 505) ; Seminar (LA 407, 507) ; Parks Schoolgrounds, and Recreation Areas (LA 411, 412, 413); Landscape Planning Analysis (LA 511, 512, 513) ; Recreation Issues (LA 410) ; Land Planning Computer Applications (LA 515 ) ; Workshop in Surveying (LA 408) ; Irrigation Workshop (LA 408) ; Special Problems (LA 406) ; Studies in Aerial Photographic Interpretation (LA 406, Geog 484).

## Graduate Studies

The graduate program in landscape architecture leading to the degree of Master of Landscape Architecture is intended for those students who are especially prepared to do original work in the field. This may include research in any of the numerous sub-areas of the profession, community service
projects which contribute to the development of harmonious man-land relationships in the region, and pedagogical preparation for teaching at the university level. Programs combining work in two or more divisions of the school are encouraged. The program takes two years.

The degree requirement for the M.L.A. is a minimum of 45 credit hours distributed as follows:
(1) 30 credit hours are normally taken within the department and 15 credit hours from related departments.
(2) 10 of the 30 credit hours are assigned to an original graduate project.

Students entering the program from related professions or other academic areas are required to earn Bachelor of Landscape Architecture equivalency before graduate work.

A B.L.A. degree will usually require three years of additional study beyond a first baccalaureate degree. Eligibility for graduate study beyond the B.L.A. will depend on a demonstrated capacity for original endeavor. Stronger students will find it possible to earn both B.L.A. and M.L.A. in ten terms. Candidates for a second baccalaureate degree are considered graduate students and should follow the application procedure below.

Applications to the graduate program should contain: (1) a completed application form and fee; (2) three letters of recommendation from persons able to provide an assessment of the applicant's strengths and potential contributions; (3) a personal statement describing pertinent background information, interests, goals and aspirations; (4) a portfolio of creative work.

Graduate Credit Courses: Graduate Project (LA 509) ; Landscape Planning Analysis (LA 511, 512, 513) ; Graduate Seminar (LA 507) ; Landscape Perception (LA 409G) ; The Contemporary American Landscape (LA 491G) ; Land Planning Computer Applications (LA 515) ; Landscape Architectural Education (LA 506) ; Planting Design Theory (LA 431G) ; The Garden (LA 432G) ; Site Development II (LA 459G) ; Site Construction II (LA 460G) ; Construction Communication (LA 461G) ; Research (LA 501) ; Reading and Conference (LA 505 ) ; Special Problems (LA 506).

General University regulations governing graduate admission may be found in the Graduate School section of this catalog.

## Undergraduate Courses

LA 200. SEARCH. 1-3 credit hours. LA 225. Introduction to Landscape Architecture. 2 credit hours. For majors and non-
majors. Lectures and multi-media presentations by faculty offers introduction and background for the profession. Members of related professions demonstrate the wide scope of the field and its interdisciplinary relationships.
LA 226. Plant Communities and Environments. 3 credit hours. Study and identification of plants indigenous to the Pacific Northwest : their range, distribution, succession, communities, and role as environmental indicators.
LA 260. Understanding Landscapes. 3 credit hours. The perception, description, explanation of landscapes as environmental sets, as bio-physical processes, cultural values.
LA 289. Landscape Architecture Design. 3-6 credit hours. Study of places, their use, and how they evolve. Fundamental principles of environmental awareness, small scale siteplanning and principles of ecology, supported with studies in abstract design and elementary graphic techniques. Discussions, talks, field trips, site investigation.
LA 326. Plant Materials, Fall. 3 credit hours. The characteristics, identification, and design uses of deciduous trees, shrubs, vines, and ground covers, with emphasis on plant composition.
LA 327. Plant Materials, Winter. 3 credit hours. The characteristics, identification, and design uses of ornamental conifers, and broadleaved evergreen trees, shrubs, and ground covers.

## LA 328. Plant Materials, Spring. 3 credit

hours. The characteristics, identification, and design uses of flowering trees, shrubs, vines, and ground covers.

## LA 357, 358. Landscape Maintenance. 3

 credit hours each term. Cultivation of landscape plant materials ; maintenance problems in relation to landscape architecture.LA 361. Site Analysis. 4 credit hours. As part of the site planning and design process, develops knowledge and understanding of place ; concerned with developing and using analytical tools and strategies for extending perception of the interaction of land and proposals for its modification ; projects; case studies.
LA 362. Site Development I. 3 credit hours. Techniques for measuring, recording sites; methods for modification of sites; grading for earth movement, drainage; site systems.
LA 366. Site Construction I. 3 credit hours. Structural additions to sites; systems, materials, connections, and finishes.
LA 389. Landscape Architectural Design. 3-8 credit hours any term. Elementary problems in landscape architecture ; emphasis on design as process, analysis of site and behavioral patterns, and the development and communication of design proposals.
LA 400. SEARCH. 1-3 credit hours.
LA 401. Research. Credit hours to be arranged.
LA 405. Reading and Conference. Credit hours to be arranged.
LA 406. Special Problems. Credit hours to be arranged. Group discussion and study in depth of problems involving conflicting facts, principles, and uncertainties.
LA 407. Seminar. Credit hours to be arranged.
LA 408. Workshop. Credit hours to be arranged. Concentrated short-term programs of study, combining instruction normally offered through regular courses, work projects, laboratory study, discussion and solution of special problems.
LA 409. Practicum. Credit hours to be arranged. Supervised field laboratory work; clinical or in-service educational experience.

Such experiments to involve planned programs of activities and study, with assured provisions for adequate supervision.
LA 410. Experimental Course. Credit hours to be arranged.
LA 410. Landscape Films. 2 credit hours. A regular film series (features and shorts) examining our perception of landscape through the film medium.
LA 410. Living in the Environment. 3 credit hours. Discussion of critical environmental issues, problems, and alternative solutions. Exploration of such interconnected topics as : urban services boundaries, urban reforestation, neighbor hood resource conservation districts, land banking, small scale agriculture, buildings as organisms, infill housing, and public environmental education.
LA 410. Urban Farm. (G) 3 credit hours. Opportunities for experimentation with knowledge gained in living in the environment: spring gardening, cooperative planting, animal management, food cooperatives, and other natural systems; moves toward a responsible, healthy urban organism.
LA 483. Plants for Interiors. 2 credit hours. Ornamental plants suitable for interior spaces; care and maintenance; projects in growing plants under greenhouse and other conditions. Open to nonmajors.
LA 489. Site Planning and Design. 3-10 credit hours any term. Advanced problems in landscape architecture; cultural determinants of site planning and design; continuing emphasis on design development and the study of natural systems and processes as indicators of carrying capacity ; integration with Site Development II.
LA 510. Experimental Course. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

LA 411, 412, 413. Parks, School Grounds, and Recreation Areas. (g) 3-6 credit hours. Principles of landscape design, related to the location and development of land for school, park, and recreation uses. Topographical factors and construction and maintenance problems. Planned for students in recreation, urban planning, and educational administration. Lectures, reports, study trips, projects.
LA 431. Planting Design Theory. (G) 3-6 credit hours. Theories and approaches to planting design ; experiential and symbolic relationships of landscape space ; order of landscape as a cultural expression of time; order of the garden as an explicit art form. LA 432. The Garden. (G) 3-6 credit hours. Analytical case studies of existing private and public gardens of the Pacific Northwest. Field trips, measured drawings, landscape restoration of historic gardens and townscapes. LA 459. Site Development II. (G) 3-6 credit hours. Complex problems in site modification and development ; road siting and layout : irrigation and lighting systems. Integration with LA 489.
LA 460. Site Construction II. (G) 3-6 credit hours. Special problems and strategies in the construction of structural additions to sites; retaining walls, bridges, roads, pools, decks, and the like ; structural calculations; integration with LA 489.
LA 461. Construction Communication. (G) 3-6 credit hours. Procedures and documents necessary to the communication of construction information; legal and management considerations; ethical concerns.

## Graduate Courses

LA 501. Research. Credit hours to be arranged. No-grade course.
LA 505. Reading and Conference. Credit hours to be arranged.
LA 506. Special Problems. Credit hours to be arranged.
LA 507. Seminar. Credit hours to be arranged.
LA 508. Workshop. Credit hours to be arranged.
LA 509. Graduate Terminal Project. Credit hours to be arranged.
LA 490. Landscape Perception. (G) 3 credit
hours. Explores the development of the human-environment relationship as its relates to landscape perception, landscape archtypes, and the development of a theoretical base for contemporary landscape design.
LA 491. Contemporary American Landscape. (G) 3 credit hours. The evolution of the contemporary American landscape as an expression of American culture.
LA 511. Landscape Planning Analysis. 3-8 credit hours. (Rural Landscape Analysis.) Training and exercises in the geo-environmental analysis of natural landscapes, resources, and rural patterns of occupance; student preparation of environmental and development sieve maps to determine the capability, compatibility, and feasibility of various uses and modifications of natural landscapes in selected rural areas of Oregon.
LA 512. Landscape Planning Analysis. 3-8 credit hours. (Urban Landscape Analysis.) Training and exercises in the socio-environmental analysis of cultural landscapes, resources, and urban patterns of occupance ; student preparation of environmental and development sieve maps to determine the compatibility, feasibility, and suitability of various uses and modifications of cultural landscapes in selected urban areas of Oregon.
LA 513. Landscape Planning Analysis. 3-8 credit hours. (Regional Landscape Analysis.)
Training and exercises in the environmental analysis of the natural and cultural elements determining human occupancy of a region : current trends in resource use and linkage systems; student preparation of environmental and development sieve maps to determine the potentials for harmonious use and modification of natural and cultural landscapes in selected regions of Oregon.

## LA 515. Land Planning and Computer

 Applications. 3 credit hours. Addresses the development, application, and evaluation of computer processing systems for land use/ site-planning issues; focuses on the theories, implications, and state of the art techniques for accessing and using the GRID data, cell storage, and analysis systems.LA 589. Land Planning and Design. 3-12 credit hours any term. Advanced planning and design problems in landscape architecture of increased cultural complexity: Land use planning, computer aided ecological analysis of land, environmental impact, urban and new community design. Integration with related planning, design and scientific disciplines.

# Urban and Regional Planning 

## Faculty

David C. Povey, Ph.D., Department Head, Associate Professor of Urban Planning (political aspects of planning, community research). B.S., Lewis and Clark, 1963 ; M.R.P., 1969, Ph.D., 1972, Cornell.
Ting-LiCho, M.C.P., Associate Professor of Urban Planning (urban design and land use planning). B.Arch., St. John's University, Shanghai, 1946 ; M.Arch., Oregon, 1951; M.C.P., Pennsylvania, 1955.
Richard L. Ragatz, Ph.D., Professor of Urban Planning (housing, community development). B.A., 1961, M.C.P., 1963, California, Berkeley ; Ph.D., Cornell, 1969.
Maradel K. Gale, J.D., Assistant Professor (legal issues in planning and environmental planning). B.A., Washington State, 1961 ; M.A., Michigan, 1967 ; J.D., Oregon, 1974.
S. Gregory Lipton, Ph.D., Assistant Professor (planning analysis and urban theory). B.S.E., 1968, M.R.P., 1973, Ph.D., Michigan, 1974 ; at Oregon since 1974.

Graduate Teaching Fellow's
Michael Buckely, B.S., Maine.
Brian Gregor, B.A., Rutgers.
Carl Grove, B.S., California Polytechnic.
Hal Hiemstra, B.S., Lewis and Clark.
Steven Lancaster, B.A., Western Washington.
Leonard Press, B.A., Bezalel A, Israel. Mary Schoolcraft, B.A., Arizona. Daniel Smit, B.A., Rhodes University. John Tamulonis, B.S., New Hampshire.

## Graduate Studies

The Department of Urban and Regional Planning at the University of Oregon offers a two-year Master of Urban Planning degree which is recognized by the American Institute of Planners. The Department is located in the School of Architecture and Allied Arts, which also includes accredited Departments of Architecture and Landscape Architecture among the five other departments.

The field of urban planning is concerned with the rational guidance of future community change. Planners are responsible for identifying and clarify-
ing the nature and effect of community problems, formulating alternative solutions and assisting in the implementation of appropriate alternatives to alleviate community problems.

To meet this challenge, the planner must be a person who is capable of drawing on the skills and expertise of many professions and disciplines. The planner must have a basic understanding of the economic, social, political, physical and environmental characteristics of a community. The planner must be able to identify these and other variables as they relate to the processes of change at both the urban and regional levels of analysis.

Recognizing that the field of urban planning requires extension into many areas of concern and that students attracted to the department have varying career expectations, the program at the University of Oregon provides considerable flexibility for the pursuit and development of skills requisite for entry into a number of professional planning specialty areas.

The objective of the program is not only to provide professional skills of current practice, but also to impart a basic knowledge of the urban and regional community, to develop competence in theory and method, and to stress creativity in the solution of community problems. The entering student should be prepared to become involved in, and committed to, the basic issues of our society. The courses offered within the Department of Urban and Regional Planning, coupled with the numerous related courses in other departments at the University, provide the student an opportunity to obtain a thorough education in the planning profession.

Applicants must have received a bachelor degree or its equivalent from a recognized college or university. The department makes no restriction as to undergraduate background.

## Requirements

A total of 72 credit hours beyond the undergraduate degree is required for the Master of Urban Planning ; 36 hours must be taken within the Department. The remaining 36 hours may be taken within the Department or from other departments at the University or elsewhere, depending upon the program pursued by the student.

Students are expected to enroll for six regular terms with an average load of 12 credit hours per term. A threemonth internship is encouraged for the summer between the first and second years in the program unless the student has already had equivalent experience.

Interships are available during the regular school year. A student may receive up to 6 credit hours for approved internship positions.

Required courses within the Department of Urban and Regional Planning include:
(1) Introduction to Urban Planning (URP 511) 3 credit hours; (2) Planning Theory (URP 515) 3 credit hours; (3) Planning Workshop: winter, spring (URP 508) 6 credit hours; (4) Student-Faculty Research (URP 590) 1 credit hour per term for winter and spring terms ; (5) Thesis or Terminal Project (URP 503 or 509) up to 10 credit hours. The remaining 12 hours required within the Department are selected by the student in consultation with an adviser, as are the other 36 hours required for the degree. Students may petition a faculty-student program committee for individual exception to degree requirements.

For additional information, please consult the Admissions Secretary, Urban and Regional Planning Department, School of Architecture and Allied Arts, University of Oregon, Eugene, Oregon 97403 ; the telephone number is (503) 686-3635.

## Undergraduate Courses

URP 350. Survey of Urban and Regional Planning. 3 credit hours. A concise survey of urban and regional planning for students seeking an introduction to the field. Review of the origins and evolution of urban and regional planning. Examination of legal, social, and political constraints on planning. Consideration of perspectives and performance of the planning profession and an appraisal of the role of the urban and regional planner. Students will acquire skills which will facilitate their involvement in planning activities in their own communities.
URP 401. Research. Credit hours to be arranged. A no-grade course.
URP 405. Reading and Conference. Credit hours to be arranged. A no-grade course.
URP 406. Special Problems. Credit hours to be arranged.
URP 407. Seminar. Credit hours to be arranged.
URP 410. Experimental Course. Credit hours to be arranged.

## Graduate Courses

URP 501. Research. Credit hours to be arranged. A no-grade course.
URP 503. Thesis. Credit hours to be arranged. A no-grade course.
URP 505. Reading and Conference. Credit hours to be arranged.
URP 506. Special Problems: Internship.
Credit hours to be arranged. Department majors may receive up to six graduate level credit hours for intern work in approved planning positions.
URP 507. Seminar. Credit hours to be arranged. Each term a series of short seminars
is offered on planning and planning-related topics. Seminars are usually held in the evening and meet three times for a total of six contact hours and 1 credit hour. Students may enroll in no more than six short seminars per term. Short seminars are offered only for a pass/no pass grade. The following topics have been offered in the past :
Fiscal Impact Analysis
Economic Development Programs
Energy Planning
Environmental Impact Assessment
Planning and Public Communication
The Politician and the Planner
Planning in the Private Sector
Utopian Communities
Growth Control Techniques
Natural Resources Planning
Social Indicators
Coastal Zone Planning
URP 508. Community Planning Workshop. 6 credit hours. Design and execution of a cooperative planning endeavor in which the insights and tools of several disciplines are simultaneously brought to bear upon a selected urban or regional problem. The topic selected changes from year to year. Students are responsible for (1) defining the problem they examine ; (2) determining the appropriate research methods and techniques for problem identification and determination of alternative solutions; (3) identifying the groups involved in promoting or resisting change ; (4) determining how the decisionmaking processes operate and how they might be changed; (5) testing alternative problem solutions to determine probable future impacts of proposed solutions.
URP 509. Terminal Project. Credit hours to be arranged. A no-grade course.
URP 510. Experimental Course. Credit hours to be arranged.
URP 510. Planning Graphics and Communication. 3 credit hours. Graphic techniques and communication concepts and roles necessary in the effective presentation of alternative solutions to planning problems. Permission of instructor required.
URP 510. Transportation Planning. 3 credit hours. Urban and regional transportation planning processes and methods evaluated. Appropriate legislation and techniques used for predicting demand of various modes of transportation.
URP 510. Urban Spatial Theory. 3 credit hours. The growth and development of cities, using theories from geography, economics, and sociology. These theories are applied to the problems of growth management and control in context of current legislation.
URP 511. Introduction to Urban Planning. 3 credit hours. Broad overview of major fundamentals involved in the urban-planning profession which relates the need for planned change to the concept of urbanization and its explanation, extent, and resulting forms. Integrated analysis of concepts and functions of the planning process as they relate to the social, economic, political, and environmental parameters of the community. Designed to provide students a perspective for defining academic and professional goals in urban planning. Open only to majors.
URP 515. Planning Theory. 3 credit hours. Examination of the fundamental bases and logic of the planning process and its basic terms and concepts; review of the major contributions to urban planning's search for a theory; the relationship of planning to the political process and rational decision making.

## URP 517. Regional Planning. 3 credit

hours. Introduction to the theory and practice of regional planning. Emphasis on substrate
regional analysis and the development of regional policies and plans as these relate to the natural and human resource base of the Pacific Northwest.
URP 520. Legal Issues in Planning and the Environment. 3 credit hours. Survey of the legal issues which relate to environmental planning ; three major areas of law considered: the Constitutional issues (due process, property rights, civil rights), envirommental legislation (NEPA, state environmental protection legislation, state and federal land-use planning laws), environmental planning law in operation (adjudication, rule-making, judicial review). Consent of instructor required.
URP 521. Planning Administration. 3 credit hours. Study of the urban-planning function in local government ; organization and activities of local, metropolitan, regional, and state planning agencies; current trends in the planning process as they affect local planning arlministration. Consent of instructor required.
URP 522. Planning Legislation. 3 credit hours. Examination of the various federal and state laws governing the planning function, regulating programs, land use, and development. Prerequisite: URP 520 or consent of instructor.
URP 525. Politics and Planning. 3 credit hours. A review of the roles of the politician and the planner in planning, policy formulation and decision-making; student reading and discussion supplemented with guest lectures by local planners, political figures, and representatives of citizen groups.
URP 526. Environmental Issues in Planning. 3 credit hours. A study of the natural and manmade environment with which the urban planner should be concerned. Emphasis on environmental problems and the planner's role in the search for their solution. Seminars and field study. Consent of instructor required.

## URP 527. Environmental Analysis in

 Planning. 3 credit hours. Reviews various approaches and methodologies employed in assessing the environmental impact of proposed policies and projects. Short and longterm impacts, social effect, economic impacts, cost-benefit analysis, influence on the ecosystem, nonquantifiable considerations in the review of environmental problems. Legislation and the regulatory structure relating to environmental problems. Practical work in critique and preparation of environmental impact statements.URP 530. Planning Analysis I. 3 credit hours. Introduction to theoretical bases and applications of research methods and techniques used in the planning process. Exploration of the nature and relevance of the scientific method for urban planning; discussion of the treatment, organization and validity of data used by planners ; relationships of quantitative analysis to planning standards and measures, long-range inference, and policy formation. Open only to majors, or with consent of instructor.
URP 531. Planning A nalysis II. 3 credit hours. Advanced course in research methods and techniques used in urban plannning. Collecting, analyzing, forecasting, and application of population, employment, economic base, land use, and transportation information. Discussion of budget, time, uncertainty of data, and other limitations imposed upon research activity. The use of computers and models in planning. Prerequisite : URP 530, or consent of instructor.
URP 540. Land-Use Planning I. 3 credit activities in urbanized areas. Explores tradi-
tional and contemporary concepts relating to the functions, distribution, and relationships of various land uses, including residential, commercial, industrial, recreational, transportation, and public facilities. Examples of plans for specific areas such as central business districts and urban renewal projects are discussed. Analysis of the new town concept. Seminars and studio assignments. Consent of instructor required.
URP 541. Land-Use Planning II. 3 credit hours. Advanced application of principles and concepts of physical planning and design problems. Evaluation of the social, economic, fiscal, and physical consequences of alternative land use development patterns. Investigation of the sources of basic information for physical design, the formulation of a physical design program, the preparation of solutions to problems and presentation techniques. Seminars and studio assignments. Prerequisite: URP 540, or consent of instructor.
URP 545. Urban Design. 3 credit hours. Advanced discussion of the role of urban design in the planning process. Investigation of historical and contemporary thought on the visual aspects of cities, including evaluation of technological and cultural influences on urban design, perception of urban form, and aesthetic qualities of physical environments. Current urban-design theories and examples of successful innovations. Methods of effecting urban design through public policy decisions. Open only to majors, or with consent of instructor.
URP 550. Social Issues in Planning. 3 credit hours. Intended to sensitize the student to the theory and workings of the societal context in which planners operate. Review of modes of citizen participation in public decision-making, advocacy planning, and participatory democracy in terms of the community planning and development processes. Examination of techniques and methods for planning social services. Consent of instructor required.

## URP 555. Housing and Urban Renewal.

3 credit hours. Survey of American housing, and its formative processes as they relate particularly to community welfare. The relationship of housing to urbanism and planning ; the functioning of housing markets and the house-building industry; housing controls; use of various methods and programs for improving housing in the community. Consent of instructor required.

## URP 556. Housing Planning. 3 credit

 hours. Integration of the activities of housing and planning so that housing issues may be approached through a comprehensive process-oriented methodology. Focus on the preparation of housing element and housing assistance plans, housing market analysis, housing survey techniques and housing information base. Prerequisite: URP 555, or consent of instructor.URP 560. Urban Development. 3 credit hours. The development of commercial, industrial, and residential areas studied from the viewpoint of the developer and planners. Feasibility and environmental impact studies are undertaken by an interdisciplinary team of students as a means of better understanding the economic, political and environmental aspect of urban development.
URP 590. Student-Faculty Research. 1 credit hour. Presentation by advanced Master's degree candidates of designs and conclusions resulting from thesis research projects. Required course for all advanced second year students and recommended for all first year Urban and Regional Planning majors. Two terms required.

## Art Education

## Faculty

June K. McFee, Ed.D., Department
Head, Professor of Art Education and Education; (psychological-social foundations; environmental design). B.A., Washington, 1939 ; M.Ed., Central Washington, 1954 ; Ed.D., Stanford, 1957.
Jack W. Burgner, M.F.A., Professor of Art (elementary school art, art education). B.S., Eastern Illinois, 1948 ; M.F.A., Colorado State College, 1949.

Grace Hampton, Ph.D., Assistant Professor of Art Education (curriculum; art of minorities) ; B.AE Art Institute of Chicago, 1961 ; M.S., Illinois State, 1968 ; Ph.D., Arizona State, 1967.

Beverly J. Jones, Ph.D., Assistant Professor of Art Education (curriculum, research, aesthetics). B.S., 1967, Oregon College of Education ; M.S., 1976, Ph.D., 1977, Oregon.
Gordon L. Kensler, Ed.D., Professor of Art Education ; Associate Professor of Education; Director, Institute for Community Art Studies (curriculum ; research ; community art). B.F.A., 1949, M.F.A., 1951, Art Institute of Chicago; Ed.D., Stanford, 1964.
$V$ incent Lanier, Ed.D., Professor of Art Education and Education (newer media ; educational theory, art criticism). B.A., M.A., 1948, Ed.D., 1954, New York University.

## Faculty Emeriti

Thomas O. Ballinger, M.A., Professor Emeritus of Art (cross-cultural art ; Nepalese art and architecture; African art). B.A., 1949, M.A., 1951, New Mexico ; at Oregon since 1952.
Jane Gehring, M.S., Associate Professor Emerita of Art (methods and curriculum; textiles). B.S., Michigan State Teachers, 1940 ; M.S., Oregon, 1960; at Oregon since 1958.

## Graduate Teaching Fellows

Peter Helzer (art education). B.S., (special education) 1969., M.S., 1977, Oregon.
Karen Hamblen (art education) B.S., 1974, M.S., 1977, Oregon.
Art Education programs are oriented toward careers related to the visual arts with the major emphasis on teaching. Freshman and sophomore work is primarily in studio art, art history, and University requirements. Although majors receive advising in this department, professional courses in art
education and education are taken at the junior and senior levels. Transfer students may enter at any level. The time required to complete the program will depend upon the extent of previous work completed. Community College students in Oregon should refer to the recommended transfer programs for art education at the University of Oregon in the Transfer Program booklet at their college. Students planning graduate study should write directly to the department for information and application forms for the master's or doctoral program.

Undergraduate Studies

## Degrees

The curriculum in Art Education leads to the bachelor of arts or the bachelor of science degree in two different programs. The principal program is part of the Secondary Education Program at the University and fulfills Basic Endorsement Certification requirements for the teaching of art in the state of Oregon. This program is expressly designed for teaching art in elementary, junior, and senior high schools. (A fifth year of graduate preparation is required for the Standard Certificate ; see Graduate Studies.)

## Teaching of Art in the Public Schools.

 The Department of Art Education offers course work to prepare students to teach Art in Oregon public schools. The Department offers work toward initial or Basic certification, and toward Standard certification. Certification as a teacher of Art requires satisfactory completion of a program of teacher education which includes subject matter preparation in Art and in professional education, plus recommendation of the institution in which the preparation is completed. The University's program to prepare Art teachers is subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission effective January 1, 1980. For specific information regarding Department requirements for the teaching endorsement in Art, students should contact the Departmental Endorsement Adviser for Teacher Education, and the Office of Secondary Education in the College of Education.The following lower-division courses are required as preparation for an art education major in this program: Studio art credits totaling a minimum of 50 credit hours. Thirty (30) of the credit hours must come from the
following areas including at least the minimum number in each area of the following : 6 credit hours of Basic Design (Art 295) ; 4 credit hours Drawing (Art 291) ; 4 credit hours Painting (Art 290); 4 credit hours Ceramics (Art 255) ; 4 credit hours Sculpture (Art 293); 2 credit hours Jewelry (Art 257) ; Weaving (Art 256) or both ; 2 credit hours Printmaking, 2 credit hours Photography or Calligraphy ; 2 credit hours (Art 321) ; Art in the Schools (scheduled in art education) ; 9 credit hours Survey of Visual Arts (ArH 201, 202, 203) ; or History of Western Art (ArH 204, 205, 206), or History of Oriental Art (ArH 207, 208, 209). Eighteen additional credit hours of elective studio work must be completed to meet the art requirements.

The following upper-division courses are necessary to complete the requirements for the major in Art Education : Introduction to Art Education (ArE 324) ; Methods and Curriculum in Secondary School Art (ArE 326) ; Seminar: Student Teaching (ArE 407 ) ; Practicum : School Art (ArE 409) ; Newer Media in Art Education (ArE 495) ; and three hours of electives in Art Education. Human Development and Education (EPsy 321); Human Learning and Education (EPsy 322 ) ; Psychology and Problems in Education (EPsy 325) ; Seminar: Teaching Strategies (CI 407) ; Social Foundations of Teaching (EdF 327) or Problems of Minorities (CI 407) or History of Education (EdP 441) or Modern Philosophy of Education (EdP 445 ) ; Reading and Writing, Secondary School (CI 469) ; Student Teaching SHS (CI 417).

The alternative program in Art Education is in Cultural Services. This program is designed to prepare students to assume roles in noncertified positions in which they may work with different age groups within the context of the visual arts. The curriculum provides opportunity for the student, with an adviser, to individualize the selection of courses while maintaining a foundation designed to develop background and understandings that will be useful in working in community agencies.

Following are the requirements for the Cultural Services Program: At least 20 credit hours of studio courses in the department of Fine and Applied Arts; 23 credit hours in Art Education, including Introduction to Art Education (ArE 324) ; Art in Society (ArE 407) ; Non-Museum Art (ArE 407) ; 9 credit hours Practicum (ArE 409) ; The Role of Art Criticism in Art Education (ArE 415) ; Newer Media
in Art Education (ArE 495) ; Survey of Visual Arts (ArH 201-203), or History of Western Art (ArH 204206) , or History of Oriental Art (ArH 208-209) ; electives within the School of Architecture and Allied Arts totaling 26 credit hours; School of Community Service and Public Affairs, 9 credit hours; Survey of the Performing Arts (AL 230-232) or courses in Music, Theater and Dance totaling 9 credit hours.

## Graduate Studies

Master's Programs in Art Education Art education offers the advanced degrees of Master of Arts and Master of Science in Art Education. Courses leading to standard certification may be combined with work for a master's degree. (See Standard Certification below.) Admission to either degree program in the Department of Art Education is determined by a selection committee of departmental faculty. Transcripts, teaching experience, and evidence of scholarship are considered. A portfolio of art work may be requested.
University Requirements: Of the 45 minimum credit hours of required coursework for the master of science or master of arts degree in art education, 30 credit hours must be taken in residence. Of the 45 credit hours, 30 hours must be completed in the major area of art education, and 15 credit hours of University electives. The master of arts degree requires competence in one foreign language.

All work for the master of science or master of arts degree must be completed within a period of seven years.
Departmental Requirements: Candidates working for either one of the above degrees may meet the requirements by attending the University during the academic year, or three consecutive summer sessions. During the first quarter of residence, the candidate, in consultation with an adviser, will plan a curriculum of coursework for the program including the required courses.

A terminal project chairman, from the faculty of the Art Education department, wil be selected during the second term of the candidate's program. The chairman will serve as the student's adviser leading toward the completion of the terminal project. A presentation of the terminal project must be made after the second term of residence.

A maximum number of 6 credit hours of graduate credit in courses numbered 501 or 505 may be taken in addition
to the required Special Problems: Terminal Project (ArE 506) 3 credit hours.

Standard Certification: Art Education offers a nondegree program leading to a Standard Certificate for teaching art. This is a program of 45 credit hours that includes renewal of the Basic Certificate and ends with the Standard Norm. The program may be completed during the academic year or during three summer sessions. Requirements for meeting the Standard Norm may be combined with work for a master's degree in a program totaling 57 credit hours.

Doctoral Programs in Art Education: The Doctor of Philosophy and Doctor of Education degrees in Art Education are three-year post-baccalaureate programs. The programs are administered by the Art Education department in the School of Architecture and Allied Arts, and granted by the Department of Curriculum and Instruction in the College of Education.

A cohesive program that relates to the student's professional goals is developed with an adviser and a doctoral committee. Professional goals include college and university teacher education and research; city and state art supervision, arts administration.

Students may develop supporting. areas in fine arts, environmental design, art history, elementary, secondary or higher education, educational psychology, a social science or in electronic and film media.

All students must meet the Graduate School and College of Education requirements for the Ph.D. or D.Ed. degrees for admission, advancement to candidacy, and dissertation.

## Undergraduate Courses

Art 321. Art in the Schools. 2 credit hours.
A transition course from university art studio practices to the context of the public school teaching of art. Organizing, designing and analyzing art experiences and activities. Preparing a budget for supplies and the caring for tools and equipment. Prerequisite: 30 hours of studio art. Kensler.
Art 322. Art in the Elementary School. 2 credit hours. An introduction to the basic skills in art of seeing, drawing, designing. Experience with a variety of art materials in two and three dimensions and newer media appropriate to the elementary school. An introduction to understanding art as it functions in society and the lives of people. Developing skills in art criticism.
ArE 323. Methods and Curriculum in Elementary School Art. 3 credit hours. Critical examination of individual and group activities currently offered in the elementaryschool art program ; lectures, curriculum design, evaluation of process and techniques; literature in the field. Satisfies the Oregon

Board of Education methods-course requirements. Prerequisite : Art 322.
ArE 324. Introduction to Art Education. 3 credit hours. Designed to provide the student with a fundamental knoweldge of teaching art in the public schools, including the history and current trends in art education; purposes and theories relevant to teaching art, structures of curriculum, individual differences of students, psychological and sociological foundations; teaching roles and differences in public schools. Required of all Art Education majors. Prerequisite or concurrent enrollment : ArE 409 Practicum: School Art. Kensler.
ArE 325. Children's Art Laboratory. 3 credit hours. Work with children in a supervised art laboratory; designed for students preparing for teaching art at both the elementary and secondary levels. Open to majors and nonmajors.
ArE 326. Methods and Curriculum in Secondary-School Art. 4 credit hours. Special Methods and Curriculum design in the teaching of art in Secondary Education. Examination of teaching methodology and theory relative to public school philosophy. Required of all art-education majors. Meets state certification requirements. Consent of instructor is required. Prerequisite : ArE 324, ArE 409. Hampton.
ArE 331. Art in Community Services. 3 credit hours. Organization of visual arts. programs for community agencies. Planning art experiences appropriate for diverse social and individual needs. Burgner.
ArE 400 . SEARCH. 1-3 credit hours.
ArE 401. Research. Credit hours to be arranged.
ArE 405. Reading and Conference. Credit hours to be arranged.
ArE 406. Special Problems. Credit hours to be arranged.
ArE 407. Seminar. Credit hours to be arranged.
CI 415. Student Teaching. 5-15 credit hours any term. Student teaching in the public schools. Arrangements are made to provide the student with teaching experiences in public schools. Permission for student teaching assignments must be obtained from the Department of Art Education. Jones.
CI 417. Student Teaching SHS. 5-15 credit hours any term. Student teaching in the public schools. Arrangements are made to provide the student with teaching experiences in public schools. Permission for student teaching assignments must be obtained from the Department of Art Education. For further information, see College of Education. Jones.

## Upper-Division Courses Carrying Graduate Credit

ArE 407. Seminar. (G) 3 credit hours. Art in Society. McFee.
Teaching Environmental Design. McFee. Not offered 1978-79.
Student Teaching. Jones ( 1 credit hour)
ArE 408. Workshop. (G) Credit hours to be arranged.
ArE 409. Practicum. (G) School Art:
Credit hours to be arranged. Field experience for the prospective art teacher; opportunity to formulate personal and professional objectives based upon field observations and opportunities. Required for all art education majors. Meets state certification requirements.

ArE 410. Experimental Course. (G) Credit hours to be arranged.
ArE 410. Crafts in the Public Schools. (G) 3 credit hours. The study and practice of techniques, processes, and teaching methods for crafts that are commonly taught in the public schools, including but not limited to leather work, bookbinding, and batik. Burgner.
ArE 410. Historical and Philosophical Foundations of Art Education. (G) 3 credit hours. A review of the history of the field and an examination of the philosophical origins of those principal concepts structuring theory and practice in teaching art. Lanier.
ArE 410. Non-Museum Art. (G) 3 credit hours. A survey of those nonmuseum/gallery visual arts which provide aesthetic involvement for a considerable portion of the public Content includes folk arts, popular arts, and mass media. Students are encouraged to explore alternative materials. Lanier.
ArE 410. Art for the Exceptional Student. (G) 3 credit hours. An exploratory course to help the art education major prepare for teaching art to the handicapped students in the regular classroom. Investigation of limitations of abilities of handicapped students and the selection of appropriate art activities. Includes some laboratory work with art materials. Kensler.

## ArE 410. Art in Multicultural Classroom.

(G) 3 credit hours. An exploration of the cultural experiences of minorities and ethnic groups as they relate to art in the public schools. Investigation and evaluation of existing multicultural art programs. Hampton.
ArE 410. Women in Art. (G) 3 credit hours. A survey of selected careers of women in the field of art and design. Examination of the social and cultural factors that affect women's careers, lifestyles, and the marketing of their work. Includes presentations by women artists. Burgner.
ArE 410. Understanding Today's Art. (G) 3 credit hours. Understanding current trends in art through dialogue with contemporary artists and designers concerning their explorations, ideas and experimentations. Burgner.
ArE 411. Methods and Research Materials: Art in Elementary Schools. (G) 3 credit hours. Study of significant literature and research in the field ; laboratory investigation of materials, ideas, and methods currently used in elementary schools. Satisfies state certification requirement for an elementary art-methods course. Consent of instructor is required. Prerequisite : Art 322 or both, or elementary classroom teaching experience. Not offered 1978-79.
ArE 415. The Role of Art Criticism in Art Education. (G) 3 credit hours. Theory and practice of art criticism as it relates to art education in the schools. Lanier.
ArE 430. Art in Special Education: The Mentally Retarded Child. (G) 3 credit hours. A theoretical examination of art experiences as a contributing factor in the learning proces of the child diagnosed as mentally retarded. Some laboratory activity with appropriate art materials. Not offered 1978-79.
ArE 432. Pre-Primary Art. (G) 3 credit hours. A study of the role of art in the education of the young child in terms of developmental trends and individual variability. Includes experimentation with materials and the development of activities. Burgner. ArE 492. Teaching Art History in Secondary School. (G) 3 credit hours. Elective
one-term course for seniors and graduate students in art education. Critical examination of problems involved in the teaching of art history in the general art program in junior and senior high schools. Investigation of traditional teaching methodology of art history as opposed to alternate possibilities. Techniques of offering content and subject Inaterial through exploratory inquiry and the use of a variety of visual media. Consent of instructor is required. Prerequisite : 9 credit hours of art history. Not offered 1978-79.

## ArE 495. Newer Media in Art Education.

(G) 3 credit hours. An investigation of the implications of new technologies, teaching strategies, concepts, and communication media for the teaching of art. Required for all arteducation majors. Meets state certification requirements for media course. Lanier.

## Graduate Courses

ArE 501. Research. Credit hours to be arranged. A no-grade course.
ArE 502. Supervised College Teaching.
Credits to be arranged. Hampton.
ArE 503. Thesis. Credit hours to be arranged. A no-grade course.
ArE 505. Reading and Conference. Credit hours to be arranged.
ArE 506. Special Problems. Credit hours to be arranged.
ArE 507. Seminar. Credit hours to be arranged.
Issues in Art Education. Lanier, McFee, Kensler.
ArE 509. Terminal Project. Credit hours to be arranged.
ArE 510. Experimental Course. Credit hours to be arranged.

## ArE 512. Research Methodology in Art

Education. 3 credit hours. Study of the fundamental methodologies of scientific inquiry with attention to their application to research in art education. The scientific bases of research; classification of research; methodologies used in descriptive, analytical, and experimental research. Development of research proposals and critique research reports. Kensler.
ArE 532. Supervision of Children's Art Laboratory. 3 credit hours. Designed to provide an opportunity for work with children in a planned laboratory situation; responsibility for program design and supervision of children's art activities. Consent of instructor is required. Prerequisite: teaching experience.
ArE 535. Art and Architecture for the School Administrator. 3 credit hours. Problems of the school administrator in the field of art programming; architecture principles in relation to school-plant design. Lectures and studio-laboratory demonstration. Not offered 1978-79.
ArE 545. Psycho-Social Foundations of Art Education. 3 credit hours. Review and analysis of social and behavioral aspects of individual and group differences in the production of art and learning about art as a basis for education in the visual arts. McFee.

## ArE 566. Curriculum Development in Art

 Education. 3 credit hours. Curriculum development in the visual arts in terms of individual and subcultural differences between students. Consent of instructor is required. Prerequisite : ArE 545, or equivalent. Hampton.
## Summer Session

The Department of Art Education offers an annual summer school program for regular students completing their degrees, and returning teachers working for standard certification, master's degrees, and professional growth. It is complementary to the academic year offerings with special courses and visiting faculty.

## Art History

Faculty
Marion Dean Ross, M.Arch., Reg. Archt., Department Head, Professor of Architecture ; Historian of Architecture (history of architecture, Latin American art). B.S., Pennsylvania State, 1935 ; M.Arch., Harvard, 1937 ; Reg. Archt., State of Loutisiana, 1946.
Robert Timothy Chasson, M.A., Visiting Assistant Profesor of Art History (medieval art). A.B., Washington University, 1964; M.A., Minnesota, 1966 ; M.A., 1972, California.
Marian Card Donnelly, Ph.D., Professor of Art History (history of architecture ; Scandinavian art). B.A., 1946, A.M., 1948, Oberlin ; Plı.D., Yale, 1956.
Katherine Patricia Erhart, A.M., Visiting Assistant Professor of Art History (Ancient art). A.B., 1972, Bryn Mawr ; A.M., Harvard, 1973.
Michael A. Jacobsen, Ph.D., Assistant Professor of Art History (Renaissance and Baroque art). B.A., 1965, M.A., 1970, California, Santa Barbara; Ph.D., Columbia, 1976.
Esther Jacobson-Leong, Ph.D., Associate Professor of Art History (Asian art). B.A., 1962, M.A., 1964, Ph.D., 1970, Chicago.
A. Dean McKenzie, Ph.D., Professor of Art History (medieval art, Russian art). B.A., San Jose State, 1952; M.A., California, 1955; Ph.D., New York University, 1965.
Richard Paulin, M.A., Director, Museum of Art, Assistant Professor of Art History (museum training, art criticism, contemporary art). A.B., DePauw, 1951; M.A., Denver, 1958.
William Shervein Simmons, M.A., Assistant Professor of Art History (modern art). B.A., Yale, 1967 ; M.A., Johns Hopkins, 1975.
Frances Van Keuren Stern, Ph.D., Assistant Professor of Art History (ancient art and archaeology). B.A., Vassar, 1968; Ph.D., Brown, 1973. (On leave, spring term 1978.)

## Faculty Emeriti

Wallace S. Baldinger, Ph.D., Professor Emeritus of Art, Director Emeritus, Museum of Art (Oriental, modern art). B.A., 1928, M.A., 1932, Oberlin ; Ph.D., Chicago, 1938; at Oregon since 1944.

Graduate Teaching Fellows, 1977-78
Paula T. Burdell, B.A., East Illinois, 1975.

Nancy Hohl Campbell, B.A., Grinnell, 1974.

Marlene B. Kerrigan, B.A., Portland State, 1976.
Andrea L. Peterson, B.A., Colorado State, 1975.
Elizabeth A. Vander Schaaf, B.A., Oregon, 1977.
The program in art history provides: (1) instruction in this basic aspect of human culture for all University students (all courses in art history are open to nonmajors) ; (2) the historic background in art and architecture needed in the several major curricula of the School of Architecture and Allied Arts; (3) a major curriculum in the history of art ; and (4) graduate studies leading to the M.A. and Ph.D. degrees.

## Undergraduate Studies

The major in the history of art combines historical study with an opportunity for studio practice and leads to the degree of Bachelor of Arts. The program for majors is designed to provide a broad perspective for the understanding of the art of the past and present, and a basis for critical judgment of individual works of art. The following lower-division courses are required as preparation for a major : studio courses (drawing, painting, scuilpture or applied design) 6 credit hours ; History of Western Art (ArH 204, 205, 206) or Survey of Visual Arts (ArH 201, 202, 203) 9 credit hours; one term of History of Oriental Art (either ArH 207, 208, or 209) 3 credit hours; two years of French or German, 24 credit hours.
The upper-division major program in art history, leading to the degree of Bachelor of Arts, includes the following required courses (Third Year) : History of art (selected), 18 credit hours ; Language or literature, 9 credit hours; Electives (recommended: philosophy, history, anthropology, literature), 18 credit hours.
(Fourth Year) : History of art (selected), 18 credit hours; Language or literature, 9 credit hours; Electives (recommended : philosophy, history, anthropology, literature, music, speech, art studio courses), 18 credit hours.

The 36 upper-division hours in Art History required for the major must be taken on a graded basis. Of these 36 hours, majors in Art History must take one sequence in Ancient, Medieval, or Renaissance Art. They must take a second sequence in either another of these periods or in Oriental or Modern Art.

Subject to the general University requirements for graded courses, a student not majoring in art history may elect to take any course offered by the department under either the graded or the ungraded option.

Students expecting to transfer to the program in art history from two-year colleges should plan to include in their program the History of Western Art, ArH 204, 205, 206, or its equivalent, and two years of French or German. They should also complete as many of the University group requirements as possible.
In addition to providing a broadly based liberal education, the program in the history of art leads to opportunities for teaching, working in art museums and in art galleries, and art publishing.

## Graduate Studies

The University of Oregon offers programs leading to the Master of Arts and the Doctor of Philosophy degree in the History of Art in the fields of Classical, Medieval, Renaissance, Modern and Oriental art, and the history of architecture. Within these general fields, particular areas may be selected for study. Some of the advanced lecture courses are offered in alternate years only. A graduate course in Museology is offered, using the facilities of the University Museum of Art.

For the Master of Arts degree, an undergraduate major in art history, or its equivalent, is ordinarily prerequisite to graduate work in the department. Two options are available: (1) a program culminating in a written thesis, and (2) a program culminating in a comprehensive written examination The student must elect one of these programs before completing 15 term hours of graduate credit. Students in both programs must satisfy the general requirements of the Graduate School regarding residence and the number of pass-differentiated hours, and must complete satisfactorily ArH 514, Bibliography and Methods. A reading knowledge of either French or German is required.

The thesis program is intended for students preferring some specialization or planning to continue in a doctoral program. Thesis-track students must complete at least 9 credit hours in graduate research seminars, and must present a written thesis for which a ntaximum of 9 credit hours is allowed. An oral examination will be given on the thesis.

The program without a thesis is intended for students who wish to undertake a more general and broadly
based course of study and who do not see continuation in a doctoral progran as their immediate goal. It is expected that these students will give emphasis to either Western or Asian art. Their programs should be based on one of the following suggested patterns.

WESTERN ART MAJORS
Credit Hours
24 Western art
9 Asian art
3 Bibliography and Methods
9 Museology or electives
45 total credit hours
ASIAN ART MAJORS
Credit Hours
24 Asian art
9 Western art
3 Bibliography and Methods
9 Museology or electives

## 45 total credit hours

The comprehensive examination will, in each case, be based on the student's individual course of studies. All entering graduate students are required to take a written examination in French or German, designed to test the student's ability to read the language. This examination is to be taken in the first term in residence. Students who do not satisfactorily complete the examination will be asked to undertake further language study. In addition, students are encouraged to undertake the study of other languages pertinent to their specific fields of research.

For the Doctor of Philosophy, in addition to the general University requirements for the degree, the following should be noted. Students entering the doctoral program who have not completed a Master's degree in Art History may be required to pass a general qualifying examination in art history during the first term in residence. The student must have passed written examinations in both French and German by the end of the first year ; demonstration of competence in other necessary languages may be required. The comprehensive examination includes three areas in art history: (1) two ad jacent areas in one of which the dissertation will be written, and (2) a third unrelated area. These areas are selected from an established list. The comprehensive examination should be taken before the completion of 45 credit hours beyond the M.A.

Applications for admission to the graduate program for the academic year 1979-80 must be received by 15 February 1979.

## Undergraduate Courses

ArH 199. Special Studies. 1-3 credit hours. ArH 200 . SEARCH. 1-3 credit hours.
ArH 201, 202, 203. Survey of the Visual Arts. 3 credit hours each term. Cultivation of understanding and intelligent enjoyment of the visual arts through a study of historical and contemporary works; consideration of motives, media, and forms. The terms need not be taken in sequence. Ross, Simmons.
ArH 204, 205, 206. History of Western Art. 3 credit hours each term. Historical survey of the visual arts in which selected works of painting, sculpture, architecture, and other arts are studied in relation to the cultures producing them. (ArH 204, Ancient; ArH 205, Medieval to Early Renaissance; ArH 206, Renaissance to modern.) Chasson, Erhart, Jacobsen, McKenzie, Simmons, Stern.
ArH 207, 208, 209. History of Oriental Art. 3 credit hours each term. Historical survey of the visual arts of India, China, and Japan, in which selected works of painting, sculpture, architecture, and other arts are studied in relation to the culture in which they were produced. (ArH 207, India; ArH 208, China; ArH 209, Japan.) Jacobson-Leong.

## ArH 400. SEARCH. 1-3 credit hours.

ArH 401. Research. Credit hours to be arranged.
ArH 405. Reading and Conference. Credit hours to be arranged.
ArH 407. Seminar. Credit hours to be arranged.
ArH 409. Practicum. Credit hours to be arranged.

## ArH 447, 448. History of Landscape

Architecture. 3 credit hours. History of gardens and public open spaces. First term : development of the formal garden from the end of the Middle Ages to the 18th century; Second term : the landscape garden since the 18th century. Oriental and modern garden design. Offered in alternate years. Ross.
ArH 451, 452, 453. History of Interior Architecture. 3 credit hours each term. History of interior architecture, including the study of contemporary furniture, textiles, rugs, etc., as an art expression. Hawn.

## Upper-Division Courses Carrying Graduate Credit

ArH 407. Seminar. (G) Credit hours to be arranged.
ArH 408. Workshop. (G) Credit hours to be arranged.
ArH 410. Experimental Course. (G)
Credit hours to be arranged.
ArH 411, 412, 413. Ancient Mediterranean Art. (G) 3 credit hours each term. Fall : the Bronze Age in the Near East; Winter Aegean Bronze Age and Geometric Art to 700 B.C.; spring : Greek and Etruscan Art c. 700c. 480 B.C. Prerequisite : ArH 204, or consent of instructor. Offered in alternate years with $\mathrm{ArH} 414,415,416$. Stern.
ArH 414, 415, 416. Greek and Roman Art. (G) 3 credit hours each term. Fall: Classical Greek and Etruscan art, c. $480-\mathrm{c} .330$ B.C.; winter : Hellenistic Greek and Etruscan art ; spring: Roman art, to Constantine the Great. Prerequisite : ArH 204, or consent of instructor. Offered in alternate years with ArH 411 ,

412, 413. Erhart, Stern. Not offered in 1978-79.
ArH 421. Early Byzantine Art. (G) 3 credit hours. Early Christian and Byzantine art from the second century to A.D. 726 . McKenzie.
ArH 422. Later Byzantine Art. (G) 3 credit hours. Byzantine art after Iconoclasm, A.D. 843-1453. McKenzie.
ArH 423. Russian Medieval Art. (G) 3 credit hours. Russian art from pre-Christian times up to Peter the Great at the beginning of the 18th century. McKenzie.
ArH 424, 425, 426. Western Medieval Art. (G) 3 credit hours each term. Fall: early medieval art in Western Europe to the eleventh century; winter: Romanesque art; spring: Gothic art. Prerequisite: ArH 205,' or consent of instructor. Offered in alternate years with $\mathrm{ArH} 421,422$, 423. Chasson, McKenzie. Not offered in 1978-79.
ArH 431, 432, 433. Renaissance Art. (G) 3 credit hours each term. Orgin and development of Renaissance art in Italy. Prerequisite : ArH 205, 206, or consent of instructor. Offered in alternate years with ArH 434, 435, 436. Jacobsen. Not offered in 1978-79.

ArH 434, 435, 436. Northern European Art. (G) 3 credit hours each term. Painting, sculpture, and graphic arts in Northern and Western Europe in the Renaissance and Baroque Periods. Prerequisite : ArH 205, 206, or consent of instructor. Offered in alternate years with ArH 431, 432, 433. Jacobsen.
ArH 441. Ancient Architecture. (G) 3 credit hours. Architecture in the Mediterranean and Near East before the Christian era. Prerequisite: ArH 204, or consent of instructor. Donnelly.
ArH 442. Early Medieval Architecture.
(G) 3 credit hours. Architecture from Imperial Rome to the Romanesque. Prerequisite : ArH 204 or ArH 205, or ArH 441, or consent of instructor. Donnelly.
ArH 443. Gothic Architecture. (G) 3 credit hours. Architecture in Western Europe from c. 1130 to c. 1500. Prerequisite: ArH 205, or ArH 442, or consent of instructor. Donnelly.
ArH 444. Renaissance and Baroque Architecture. (G) 3 credit hours. Architecture in Italy and Western Europe from 1400 to the 18th century. Prerequisite: ArH 206, or consent of instructor. Ross.
ArH 445. Nineteenth Century Architecture. (G) 3 credit hours. Architecture from the Industrial Revolution to c. 1890. Prerequisite : ArH 206 or ArH 444, or consent of instructor. Ross.

## ArH 446. Twentieth Century Architec-

 ture. (G) 3 credit hours. Architecture from the $A r t$ Nouveau to the present. Prerequisite : ArH 206 or ArH 445, or consent of instructor. Ross.ArH 454, 455, 456. Art in Latin America. (G) 3 credit hours each term. Fall: PreColumbian art in the Mexican, Mayan, and Andean regions; winter: art in the Spanish and Portuguese colonies; spring: 19thand 20th-century art. Ross. Not offered in 1978-79.
ArH 457, 458, 459. Scandinavian Art. (G) 3 credit hours each term. Prehistoric art in Scandinavia from the Paleolithic through the Viking eras. Medieval art in Denmark, Norway, Sweden, and Finland. Renaissance and modern art in the Scandinavian countries with special emphasis on folk art and industrial design. Prerequisite : ArH 204, 205, 206 or consent of instructor. Donnelly.

ArH 464, 465, 466. Chinese Art. (G) 3 credit hours each term. Origin and development of the major Chinese arts, including bronzes, sculpture, painting, and architecture, from the Shang through the Ch'ing dynasties. Prerequisite : ArH 208, or consent of instructor. Jacobson-Leong.
ArH 467, 468, 469. Japanese Art. (G) 3 credit hours each term. Epochs of art in Japan, including architecture, landscape design, sculpture, and painting, from prehistoric times to the present. Prerequisite: ArH 209 , or consent of instructor.
ArH 470. Historic Preservation. (G) 3 credit hours. The theory and history of the preservation of historic sites and buildings. Legislation and public and private funding in the United States and Europe. Recording historic sites: archives and photography. Donnelly.
ArH 471, 472, 473. American Architecture. (G) 3 credit hours each term. History of architecture in the United States from the Colonial era to the present. Students wishing to devote additional time to the Pacific Northwest or other special regions may enroll also under ArH 401 , Donnelly, Ross. Not offered in 1978-79.
ArH 477, 478, 479. Modern Art. (G) 3 credit hours each term. Art in the 19th and 20th centuries. Prerequisite: ArH 206, or consent of instructor. Simmons.

## ArH 481. The History of Photography.

 (G) 3 credit hours. Photographic imagery as it related to individual expression and contemporary culture, 1839-1960.ArH 482. The Nonfiction Film. (G) 3 credit hours. Films based upon fact, with creative interpretation ; international influences through the work of significant film makers; interpretation of reality in a variety of context, historical and contemporary.

## Graduate Courses

ArH 501. Research. Credit hours to be arranged. A no-grade course.
ArH 503. Thesis. Credit hours to be arranged. A no-grade course.
ArH 505. Reading and Conference. Credit hours to be arranged.
ArH 507. Seminar. Credit hours to be arranged. Each term the department offers a number of seminars. The following subjects indicate the general areas in which seminars are given. They are not necessarily the specific seminar titles.
Greek and Roman Art. Stern.
Ancient Topography and Monuments. Stern.
Mythology in Ancient Art. Stern.
Byzantine Art. McKenzie.
Early Russian Painting. McKenzie.
Medieval Serbian Painting. McKenzie.
Renaissance Art. Jacobsen.
Baroque Art. Jacobsen.
Nineteenth Century Art. Simmons.
Twentieth Century Art. Simmons.
Indian Art.
Chinese Bronzes. Jacobson-Leong.
Chinese Painting. Jacobson-Leong.
Eurasian Bronze Age Art. Jacobson-Leong.
Japanese Art.
American Architecture. Donnelly, Ross.
Islamic Architecture. Ross.
Oregon Architecture. Ross.
Prints and Drawings.
History of Film and Photography.
ArH 509. Practicum. Credit hours to be arranged.

ArH 510. Experimental Course. Credit hours to be arranged.
ArH 511, 512, 513. Museology. 3 credit hours each term. Theories and techniques in the operation of art museums. Paulin.

ArH 514. Bibliography and Methods. 3 credit hours. Introduction to the bibliography and methodology of art history. Required of entering graduate students in art history. Staff.


## Fine and Applied Arts

## Faculty

Robert C. James, M.F.A., Department Head, Professor of Art (ceramics). B.A., California, Los Angeles, 1952; M.F.A., Cranbrook Academy, 1955.

Ralph B. Baker, M.F.A., Associate Professor of Art (painting, drawing). B.A., 1956, M.F.A., 1964, Washington.

Paul E. Buckner, M.F.A., Professor of Sculpture (the human and organic form). B.A., Waslington, 1959 ; M.F.A., Claremont, 1961.

David G. Foster, M.F.A., Professor of Art (graphic design). B.A., Institute of Design, Illinois Institute of Technology, 1951; M.F.A., Oregon, 1957.
Alan Haemer, M.F.A., Visiting Lecturer in Art (painting). B.F.A., Syracuse, 1931 ; M.F.A., Oregon, 1971.
George Kokis, M.F.A., Associate Professor of Art (ceramics). B.F.A., 1955, M.F.A., 1961, Alfred University (New York).
Robert Kostka, M.S., Associate Professor of Art (graphic design). B.S., 1951, M.S., 1956, Institute of Design.
LaVerne Krause, B.S., Professor of Art (printmaking, painting). B.S., Oregon, 1946.
C. Max Nixon, B.F.A., Professor of Applied Design (metalcraft, jewelry, weaving). B.F.A., Kansas, 1939.
Frank S. Okada, B.F.A., Associate Professor of Art (painting, drawing). B.F.A., Cranbrook Academy of Art, 1957.

Kenneth H. Paul, M.A., Assistant Professor of Art (printmaking, painting) . B.A., 1961, M.A., 1965, Wyoming.
Richard C. Pickering, M.F.A., Visiting Assistant Professor of Art (transcurricular consultant). B.A., Arizona State, 1964 ; M.F.A., Oregon, 1970.
Barbara Pickett, B.S., Visiting Instructor of Art (weaving). B.S., Portland State, 1971.
William N. Roy, M.F.A., Assistant Professor of Sculpture (cast, steel, fibreglass sculptures). B.F.A., Miami, 1965 ; M.A., 1968, M.F.A., 1968, Iowa.
David R. Stannard, M.S., Associate Professor of Art (ceramics). B.A., Redlands, 1948 ; M.S., Oregon State, 1966.

Jay V. Soeder, M.F.A., Associate Professor of Art (painting, drawing).
B.S., Indiana State Teachers, 1948 ; B.F.A., 1950, M.F.A., 1950, Chicago Art Institute.
Jan Zach, Professor of Sculpture (sculpture). Academy of Fine Art, Prague, 1938.

## Faculty Emeriti

David C. McCosh, Professor Emeritus of Art (painting, lithography). Grad., Art Institute of Chicago, 1927 ; at Oregon since 1934.
C. B. Ryan, M.F.A., Professor Emeritus of Art (painting, drawing) . B.S., 1939, M.F.A., 1940, Oregon ; at Oregon since 1946.
Andreze M. Vincent, Professor
Emeritus of Art (painting). Grad., Chicago Art Institute, 1929; at Oregon since 1929.

Graduate Teaching Felloze's, 1977-78
Marya Axner (ceramics), B.A., Knox College, 1974.
Michael Besh (graphic design), M.A., Antioch West, 1976.
Pam Caulley (graphic design), B.E., Oregon, 1969.
Peg Coe-Clark (painting), B.A., Oregon, 1963.
Mollie Favour-Miller (ceramics), B.S., Arizona, 1967.
Craig Henderson (graphic design), B.A., Oregon, 1973.

Jim Hirschfield (sculpture) B.F.A., Kansas City Art Institute, 1976.
Bonnie Kubasta (jewelry), B.F.A., Ohio State, 1975.
Susan Lloyd (graphic design), B.S., Oregon, 1970.
Jim Luse (ceramics), B.S., Oregon, 1973.

Marcia Lynch (printmaking), B.S., Oregon, 1972.
Didier Maujean (printmaking), B.F.A., Colorado State, 1972.

Jennifer Owen (ceramics), A.B., Princeton, 1974.
Jack Perry (sculpture) B.A., Washington State, 1976.
Robert Racine (graphic design), B.F.A., Oregon, 1976.

Jim Rappa (sculpture), B.F.A., Syracuse, 1975.
Larry Sommers (printmaking), B.F.A., Central Michigan, 1975.

Charlie True (graphic design), M.S., Oregon, 1975.

The Department of Fine and Applied Arts has courses of instruction in: painting, printmaking, sculpture, visual design, ceramics, weaving, jewelry and metalsmithing. The lower-division courses throughout the department are designed to serve both those students doing their major work in the department and non-majors seeking studio work as a part of a liberal education.

## Undergraduate Studies

Three baccalaureate degrees are offered by the department: a four-year program leading to the Bachelor of Arts or Bachelor of Science degree, and a program, usually taking five years, leading to the Bachelor of Fine Arts. The general departmental requirements for the B.A. and B.S. degree are 72 credit hours, including 9 hours of art history and 6 hours of either drawing or basic design. The requirements for the B.F.A. degree are as follows:
(1) completion of a five-year program totaling 220 credit hours; (2) satisfaction of general University requirements for a B.A. or a B.S. degree; (3) satisfaction of departmental requirements for a program leading to the B.A. or B.S. degree and, in addition, in the fifth-year, 23 credit hours of studio work, 9 credit hours in art history, and 4 credit hours of Terminal Creative Project (Art 498). Admission to the B.F.A, route is limited and based on a portfolio review of the student's work. Application to the B.F.A. program, and presentation of the portfolio, is usually made during the student's fourth year. Additional information concerning the B.F.A. degree is available in the departmental office. Students who have completed a comparable four-year curriculum in art at another institution may be admitted to the fifthyear B.F.A. program; such B.F.A. candidates must, however, satisfy the University's 45 credit-hour residence requirement for all undergraduate degrees.

Because the department stresses interdisciplinary routes of study oriented to the individual student's interests and needs, each student is encouraged to select a regular faculty adviser during the first year. The importance of program planning cannot be over-emphasized. The necessity for the selected adviser to be familiar with and sympathetic to the student's direction and capabilities is critical to the development of worthwhile courses of study.

General Lower-Division Courses: Drawing (Art 291) and Basic Design (Art 295) are designed as introductory courses, preparatory to further work in the department. For descriptions, see course listings.

## Graduate Studies

The graduate degree offered by the Department of Fine and Applied Arts is the Master of Fine Arts. The M.F.A. degree is offered in each area of instruction: painting, printmaking, sculpture, graphic design, ceramics, jewelry and metalsmithing, and weaving.

The departmental intent in the M.F.A. program is to promote mature and independent creative work based on a colleague-like relationship among members of the studio community. The faculty, with this in mind, prefers to rely more heavily on advising than on formal prescription.

The M.F.A. is the terminal degree in the studio arts. As such, it is designed to transcend the credit hour and coursework requirements normally associated with undergraduate and master's degrees. The M.F.A. is a two-year program which is ordinarily six consecutive terms of regular session as a full-time student. It is not the intention of the departmental faculty to generate a preoccupation with credit hour requirements, but there are certain minimum conditions which may be reflected as credit-hour requirements or considerations. The six terms of fulltime residence results in a fifty-four credit hour minimum. Other requirements are : six formal courses (no total credit-hour minimum) in either art history or art theory or both, plus a minimum of nine credit hours of Terminal Project (Art 509). Graduate students in this department may elect to take all their work on a pass-no pass (ungraded) basis. Because the principal requirements here are those of residence, which may not be waived, there is no policy for the acceptance of transferred graduate credit. All work done elsewhere, both private and in other schools and foundations though not reviewed for credit, will be honored.

Most of the first year is spent in establishing work patterns and in becoming more familiar with the courses of instruction, staff, and facilities of the department. Prospective students are expected to have the
equivalent of this department's B.F.A. degree ; those admitted without this experience are expected to make up the background deficiences before being considered as entered in the two-year program.
It is assumed prospective graduate students have some knowledge of the department's offering, and seek entrance for a particular reason. Those having visited the School prior to application and those having based their application on some firm knowledge have found the transition from the first year into the more independent phase of the terminal project of the second year most rewarding.

## Formal Procedures and Conditions

(1) Specific inquiry based on discipline commitment. (2) Submit application, transcripts, vitae, portfolio, and letters of recommendation as requested. (All applicants accepted into the graduate school wil be given conditional admission to study for the M.F.A. which is graduate classification G3.)

Until or unless an entering student has a specific request for a graduate adviser, the faculty member so designated customarily serves as class 3 adviser. During this time, the student's enrollment will consist of course work and special studies in his or her discipline, and in other instructional areas to assure broader acquaintance with the department and the University.

Some time after the first term of residence, and usually before the end of the third, a committee for reviewing candidacy is constituted by the class 3 adviser. The committee is to be composed of not less than four members of departmental faculty two of whom, wherever possible, should be from the candidate's area of discipline and at least one member from another discipline of the department. In those instances in which faculty members from outside the department are wanted on this committee, they are to be appointed to serve in a nonvoting capacity. The purpose of this meeting is for a departmental committee to review with the student his or her record of accomplishment, along with examples of past and current work, in order to advise on and to recommend advancement to candidacy with change of classification to G8.

As soon as the student's status has been classified G8, the student is eligible to select a terminal adviser from the graduate faculty in his or her discipline.

This adviser, in counsel with the candidate, selects the committee. The committee is composed of the adviser as chair, three other departmental faculty members, and usually a faculty member from outside the department. This entire committee will meet with the student for a preliminary statement of project intention (the preliminary review ), at least two progress meetings, and the terminal review.
As soon as the project proposal is organized, the chair arranges a meeting of the committee for a preliminary review of the proposed project. The purpose of the preliminary review is to acquaint all parties with the conceptual and technical particulars of the proposal and to discuss the merit of the project and its appropriateness to the terminal degree. If serious and irreconcilable differences of opinion arise, the committee should be reconstituted to begin again. Although the preliminary review is not a public meeting, the departmental faculty should receive the courtesy of notification. However, it should be understood that guests are not to compromise the purpose of the meeting. The preliminary review is usually held at such a time as would allow three subsequent terms to complete the terminal project.

During the course of work on the terminal project, the candidate arranges for individual conference with committee members and should arrange through the chair at least two committee meetings for progress reports.

At least two weeks prior to the terminal review, each committee member should receive a rough draft of the report summarizing the terminal project. At least one week before the terminal review, the time, date, and place are publicly announced by the chair. The department will assist the candidate in arranging the space and dates for the public exhibition of his or her terminal project. The final review is open to all faculty and graduate students of the University. The exhibition is open to the public.

The degree is officially granted after the candidate has fulfilled all requirements, including the submission to the department of a project report, in a form appropriate to the nature of the project and suitable for binding for use in the School Library. This bound copy of the terminal report must be signed by the terminal project adviser. An additional copy of the report may be made available to the area of discipline for its use. The student may also request an additional bound copy.

## General Departmental Courses

Art 199. Special Studies. 1-3 credit hours.
Art 200. SEARCH. 1-3 credit hours.
Art 291. Drawing. 2-4 credit hours any term. A beginning course in observation, selection, and recording of significant elements in various drawing media.
Art 295. Basic Design. 2-4 credit hours any term. Programming of information and processes invested in the act of designing; exercises in understanding the syntax of problem posing. Open to nonmajors. A nograde course. James, Kostka, Pickering, Stannard.
Art 400 . SEARCH. 1-3 credit hours.
Art 410. Experimental Course. (G) Credit hours to be arranged.
Art 482. Anatomy for Artists. 2-4 credit hours, winter. Study of the principles and formation of the skeletal and muscular structure of the human figure. Prerequisite: Art 290, or Art 291. Buckner.

## Ceramics

## Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours.
Art 255. Ceramics. 2-4 credit hours any term. Both directed and self-directed opportunities. Instruction available in many aspects of the study of ceramic processes. Open to nonmajors. Kokis, Stannard.
Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 406. Special Problems. Credit hours to be arranged.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses Carrying Graduate Credit

Art 407. Seminar. (G) Credit hours to be arranged. Consent of instructor is required.
Art 408. Workshop. (G) Credit hours to be arranged.
Art 455. Advanced Ceramics. (G) 2-4 credit hours any term. Intensive study opportunities for those who seek the integration of skills, theory, and practice with the development of personal meanings. Kokis, Stannard.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required.

Art 507. Seminar. Credit hours to be arranged. Consent of instructor is required.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required.
Art 509. Terminal Creative Project. Credit hours to be arranged. Consent of instructor is required.

## Visual Design <br> Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours.
Art 382. Letter Form. 2 credit hours any term. Fall term, study of fundamentals of calligraphy. Winter term, study of typography. Spring term, codification techniques as related to photo and electronic generated graphics. A no-grade course.
Art 383. The Graphic Symbol. 2 credit hours any term. Studies in symbolic communication with phonogram, monogram, and logogram. Exploration in the graphic evolution of symbols. May be repeated for credit. Prerequisite: Art 382. Foster.
Art 384. Photography. 2-4 credit hours.
Introduction to the camera and the darkroom.
Photographic seeing, selection, imagery. Consideration for light, materials, process. Lecture and laboratory.
Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged.
Art 406. Special Problems. Credit hours to be arranged.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses <br> Carrying Graduate Credit

Art 407. Seminar. (G) Credit hours to be arranged. Consent of instructor is required.
Art 408. Workshop. (G) Credit hours to be arranged.
Art 493. Visual Continuity. (G) 2-4 credit hours any term. Study of the problems of image sequence and continuity in printed material, display, photography, and film. Prerequisite : Art 295, or consent of instructor. Open to nonmajors. Foster.
Art 484. Advanced Photography. (G) 2-4 credit hours any term. Previsualization of images ; control and manipulation of light and the resulting tonal scale in photography (zone system). Advanced processes, and their individual application to gain predictable results. Exploration of color as form. Processes and materials of color printing. Introduction to the large format camera. Prerequisite: Art 384, or consent of instructor.
Art 495. Motion Graphics. (G) 2-4 credit hours any term. Study of moving imagery, both diagrammatic and photographic: use of video in graphic design. Study includes various animation techniques and sound synchonization methods. Prerequisite: Art 295, Art 493, or consent of instructor.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required.
Art 507. Seminar. Credit hours to be arranged. Consent of instructor is required.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required.
Art 509. Terminal Creative Project. Credit hours to be ar ranged. Consent of instructor is required.

## Jewelry and Metalsmithing

## Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours. Art 257. Jewelry and Metalsmithing. 2-4 credit hours any term. Introduction to the handworking of nonferrous metals-copper, brass, bronze, silver, gold ; practical information about making jewelry and metal objectssoldering, stone setting, centrifuge casting, forging, raising. Nixon.
Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 406. Special Problems. Credit hours to be arranged.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses <br> Carrying Graduate Credit

Art 407. Seminar. (G) Credit hours to be arranged. Consent of instructor is required. Art 408. Workshop. (G) Credit hours to be arranged.
Art 457. Advanced Jewelry and Metalsmithing. (G) 2-4 credit hours any term. Emphasis on creative work. Advanced problems in forging, raising, centrifuge casting, enameling, etching, stonesetting. Nixon.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required.
Art 509. Terminal Creative Project. Credit hours to be arranged. Consent of instructor is required.

## Painting

## Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours.
Art 290. Painting. 2-4 credit hours any
term. A course exploring basic visual elements and their application to painting as a means of expression. Traditional subject matter is incorporated: still life, landscape, figure. No prerequisites but prior experience in drawing is recommended. Baker, Haemer, Okada, Soeder.
Art 292. Water Color. 2-4 credit hours. Basic instruction in the use of water media, with particular attention to the limitations and capabilities of these media.

## Art 381. Water Color. 2-4 credit hours.

 Instruction in visual and manual understanding of the media, with emphasis on transparency and fluidity. Special attention to notation of transitory conditions of light and atmosphere. Prerequisite : Art 291 or Art 292. Okada, Soeder.Art 390. Painting. 2-4 credit hours any term. Advanced study of painting concepts and technical processes. Independent initiative is encouraged. Prerequisite : 8 credit hours of lower-division painting or the equivalent. Baker, Okada, Soeder.
Art 391. Drawing. 2-4 credit hours any term. Continued study in observation related to visual and spatial phenomena. Prerequisite : 4 credit hours of Art 291. Baker, Okada, Roy, Soeder.
Art 392. Composition and Visual Theory. 2-4 credit hours any term. A three-term sequence concerned with visual theory and its relation to visual, tactile, kinetic, and mnemonic characterization. Prerequisite: 4 credit hours of Art 295 or Art 291, or consent of instructor. Soeder.
Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged.
Art 406. Special Problems. Credit hours to be arranged.
Art 481. Water Color. 2-4 credit hours, spring. Advanced study in selected water media. Prerequisite : Art 381, or consent of instructor. Okada, Soeder.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses Carrying Graduate Credit

Art 407. Seminar. (G) Credit hours to be arranged. Consent of instructor is required.
Art 408. Workshop. (G) Credit hours to be arranged.
Art 490. Advanced Painting. (g) 2-4 credit hours any term. Advanced study in the use of various media to characterize observation of a variety of subject matter, including still life, landscape, and figure. Prerequisite: 6 credit hours of Art 390, or equivalent. Baker, Okada, Soeder.
Art 491. Advanced Drawing. (G) 2-4 credit hours. Advanced work in the use of drawing as a conceptual and technical tool for revealing information from various sources, including still life, landscape, and figure. Prerequisite: 6 credit hours of Art 391. Baker, Okada, Roy, Soeder.

Art 492. Composition and Visual Theory. (G) 2-4 credit hours any term. A study of light, color, surface, and visual processes as related to painting and visual communication. Baker, Soeder.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required. Art 507. Seminar. Credit hours to be arranged. Consent of instructor is required.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required. Art 509. Terminal Creative Project. Credit hours to be arranged. Consent of instructor is required.
Art 590. Graduate Studies in Painting. Credit hours to be arranged. Work at an advanced level with problems of color and form, techniques, and processes. Consent of instructor is required.

## Art 591. Graduate Studies in Drawing.

 Credit hours to be arranged. Work at an advanced level with problems of form, technique, processes, and visual theories. Consent of instructor is required.
## Printmaking <br> Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours.
Art 349. Fundamentals of Printmaking. 3 credit hours any term. Introduction to techniques of woodcut, silk screen, collagraph, lithography, and etching as primary means of expression. Practice in hand-printing of editions. Rotating term-long offerings in each media. May be repeated for credit. Krause, Paul.
Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged.
Art 406. Special Problems. Credit hours to be arranged.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses Carrying Graduate Credit

Art 407. Seminar. (G) Printmaking. Credit hours to be arranged. Krause.
Art 408. Workshop. (G) Credit hours to be arranged.
Art 480. Lithography. (G) 2-4 credit hours any term. Principles and methods of lithography, including color printing and advanced techniques. Practice in all stages of stone preparation and hand-printing of editions, with special emphasis on the medium's potential as a conceptualizing resource. Consent of instructor is required. Prerequisite : Art 349. Paul.
Art 483. Intaglio Printing Methods. (G)
2-4 credit hours any term. Etching, dry
point, engraving, acquatint, soft ground, sugar life, inkless embossment, color and relief printing, with generally a three-term cycle observed in the introduction of the above methods. Intensive individual work combined with lecture demonstrations, critiques, and group discussions all serve to relate imagery development, philosophy of printing, self-expression, and social responsibility to the development of plates and the hand-printing of editions. Consent of instructor is required. Prerequisite : Art 349. Krause.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required.
Art 507. Seminar. Credit hours to be arranged. Consent of instructor is required. Krause.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required.
Art 509. Terminal Creative Project. Credit hours to be arranged. Consent of instructor is required.
Art 580. Graduate Studies in Printmaking. Credit hours to be arranged. Experimental investigation and theoretical analysis of problems in various printmaking techniques: woodcut, etching, silk screen, wood engraving, lithograph, collagraph. Intensive independent work combined with regular review and critique. May be repeated for credit. Consent of instructor is required.

## Sculpture

## Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours.
Art 293. Elementary Sculpture. 2-4 credit hours any term. Introduction to materials. Elementary consideration of form ; technical and compositional exercises in clay, plaster, wood, and stone. Buckner, Roy, Zach.
Art 393. Intermediate Sculpture. 2-4 credit hours any term. An expansion of skills through practice in the basics of additive, reductive, and constructive sculpture. Prerequisite: Art 291, or consent of instructor.
Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 406. Special Problems. Credit hours to be arranged.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses Carrying Graduate Credit

Art 407. Seminar. (G) Credit hours to be arranged. Consent of instructor is required. Art 408. Workshop. (G) Credit hours to be arranged.
Art 489. Metal Casting. (G) 3 credit hours any term. Basic principles of ferrous and
nonfer rous metal casting in lost wax and sand ; experimental use of polystyrene and other casting methods. Design and operation of furnaces and ovens. May be repeated for credit. Buckner.
Art 494. Advanced Sculpture. (G) 2-4 credit hours any term. Coordination of sculpture with related fields of architectural, landscape, interior, and industrial design. Buckner, Zach.

Art 496. Ceramic Sculpture. (G) 2 credit hours any term. Techniques in building, modeling, molding, and surfacing terra cotta. Emphasis on the character of the materials and their effectiveness as sculptural media. Study of forms appropriate to residential and civic design. Prerequisite : three terms of Art 293, three terms of Art 255.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required.
Art 507. Seminar. Credit hours to be arranged. Consent of instructor is required.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required.

Art 509. Terminal Creative Project. Credit hours to be arranged. Consent of instructor is required.

## Art 594. Graduate Ctudies in Sculpture.

 Credit hours to be arranged. Work at the graduate level in the problems of forms and their relationship to space. Studio research into traditional and contemporary concepts to find personal expression. Consent of instructor is required.
## Weaving

## Undergraduate Courses

Art 199. Special Studies. 1-3 credit hours.

## Art 256. Weaving. 2-4 credit hours any

 term. Introduction to basic weaving techniques. The dressing, care, and manipulation of several types of looms. Experimentation with a wide variety of fibers. Production of textiles of original design on 4 - and 8 -harness looms.Art 401. Research. Credit hours to be arranged.
Art 405. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 406. Special Problems. Credit hours to be arranged.
Art 498. Terminal Creative Project. Credit hours to be arranged. Open only to candidates for the B.F.A. degree.

## Upper-Division Courses Carrying Graduate Credit

Art 407. Seminar. (G) Credit hours to be arranged. Consent of instructor is required.
Art 408. Workshop. (G) Credit hours to be arranged.
Art 456. Advanced Weaving. (G) 2-4 credit hours any term. Emphasis on creative work. Production of a wide variety of hand-woven fabrics. Historical studies, fabric analysis, spinning, dyeing.
Art 458. Textile Printing. (G) 2-4 credit hours any term. Advanced problems in design and color, applied to standard textiles. Technique in pattern design and yardage printing. Silk screen, block print, etc. Offered spring term only.

## Graduate Courses

Art 501. Research. Credit hours to be arranged. Consent of instructor is required. A no-grade course.
Art 505. Reading and Conference. Credit hours to be arranged. Consent of instructor is required.
Art 506. Special Problems. Credit hours to be arranged. Consent of instructor is required.
Art 507. Seminar. Credit hours to be arranged. Consent of instructor is required.
Art 508. Workshop. Credit hours to be arranged. Consent of instructor is required.
Art 509. Terminal Creative Project. Credit hours to be arranged. Consent of instructor is required.


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## College

of

## Business Administration

James E. Reinmuth, Ph.D., Dean. Härold K. Strom, Ph.D., Associate Dean.
Catherline M. Jones, Ed.D., Associate Dean.

The College of Business Administration recognizes as its primary function in the University the provision of the broad education and understanding essential for responsible administrative, research, and technical careers in business, government, and education.

To insure such an education for its students, the college requires that undergraduate majors take a minimum of 40 per cent of their work in arts and sciences. Within the college, professional courses treat subjects affecting firms and organizations and their responsibilities to the owners, employees, customers, and society in general.

The instructional program of the college is offered in two schools : the Undergraduate School of Business and the Graduate School of Management. The Graduate School of Management operates under the general direction of the Graduate School of the University.

The College of Business Administration was established in 1914 as the School of Commerce; the name was changed to School of Business Administration in 1921 ; the present name was adopted in 1967. Its undergraduate program was accredited in 1923, and its graduate program in 1962 by the American Assembly of Collegiate Schools of Business. Through the Graduate School of Management, the College offers a master's degree program and a doctoral program. Details of these programs may be found in the section beginning on page 206.

The following business honorary and professional societies have chapters at the University: Alpha Kappa Psi, Phi Beta Lambda, and Phi Chi Theta, professional business fraternities ; Beta Alpha Psi, accounting ; Delta Nu Alpha, transportation; and Pacific Northwest Personnel Managers Association.

The college maintains a student exchange program with a foreign school of business.

In addition to its curricular program, the College of Business Administration faculty maintains an active interest in research. This is manifested by the
research centers which are incorporated in its organizational structure, and which are described below. The amount of activity within these centers varies, and depends on grants and contracts from foundations, government agencies, and the business community as well as availability of general University funds.
Bureau of Business Research: The Bureau of Business Research facilitates, encourages, and conducts research in business and related fields. Assistance is provided in identifying research opportunities, funding sources, and in research design, facilities, staffing, and other requirements for both basic and applied business research.
The Bureau of Business maintains liaison with other specialized research centers and with foundations, and federal, and state research agencies. The Bureau publishes the Oregon Business Revierw and occasional monographs reporting the results of business research, and other College of Business publications. M. Venkatesan, Director.
Center for Capital Market Research: The Center for Capital Market Research sponsors, supervises, and coordinates research projects exploring important characteristics of equity and debt instruments, markets in which these instruments are traded, institutions dealing in these instruments, and investment strategy and evaluation. In addition, it undertakes applied contract research projects in finance for national and local governmental units. George G. Kaufman, Director.

Forest Industries Management Center: The major goal of the Forest Industries Management Center is to stimulate research and education related to the forest products field. A special MBA program in Forest Industries is offered to graduate students who have undergraduate degrees in forestry. Details of the program appear on page 207. Stuart U. Rich, Director.

Experimental Center for the Advancement of Invention and Innovation: The Center for Invention and Innovation provides a program whereby ideas and inventions submitted by the public can be evaluated and researched by students. Student work assignments usually include a variety of business
needs, according to the objectives of each individual. This Center is funded by the National Science Foundation, and is one of three in the nation.
Gerald G. Udell, Director.
Institute of Industrial and Labor Relations: This Institute functions to stimulate research and education related to industrial and labor relations. The Institute offers an integrated multidisciplinary program leading to either an M.S. or M.A. degree in Industrial Relations. Details of the degree program appear on page 213. Eaton H. Conant, Director.
Office of External Affairs: This office is responsible for alumni, corporate, and public relations, fund-raising, continuing professional education, and collegiate liaison with the University Career Planning and Placement Office. Charles Kittleson, Director.

The College of Business Administration supports the University's commitment to affirmative action to promote equal employment opportunities for women and minorities.

## Undergraduate School of Business

To earn a degree in the Undergraduate School of Business, a student must complete one of the major options offered. These are : Accounting, Business and Construction, Business Environment, Finance, Management, Marketing, Quantitative Methods, Real Estate, Transportation and Logistics.

Combined with other work, each of the options may lead to the Bachelor of Business Administration (B.B.A.), Bachelor of Science (B.S.), or Bachelor of Arts (B.A.) degrees.

A student who has a baccalaureate or master's degree in business administration is not eligible for another degree in business administration at the baccalaureate level. Likewise, a student may not receive two or more baccalaureate degrees in Business Administration simultaneously.

Requirenients for Admission: Students who plan to pursue a baccalaureate degree (B.B.A., B.S., B.A.,) in business must be formally admitted as majors in the College of Business Administration. Prior to formal application for admission, a student should register as a prebusiness major. Prebusiness status does not, however, guarantee admission as a business major. Formal application should be made through the College of Business Administration Student Advising Office in Room 271 Gilbert Hall.

The following criteria must be met by those students who want to apply for admission as business majors:
(1) The student must have completed at least 93 credit hours of course work at the University of Oregon or at some other college or university. Credit hours that are accepted as transfer credits by the University will count toward the 93 hours. At least 60 of the 93 hours of course work must have been graded.
(2) The student must have completed the following caurses from the College of Business Administration Conceptual Tools Core:

(3) The student must have completed the University group requirements and Wr 121, and either Wr 122 or Wr 123.
(4) The student must have a cumulative grade point average of 2.5 or better. (A counts as 4 points; $\mathrm{B}, 3$ points ; C, 2 points ; D, 1 point ; Fs and Ns count as 0 points.) The grade point average will be based on all courses attempted.

## Admission Procedures:

(1) University of Oregon Students: Students may make application for admission as business majors either during the term when they are completing the admission criteria presented in (1) through (4) above or after all admission criteria have been met. (2) Transfer Students: Those who have met the admission criteria presented in (1) through (4) above may apply for admission as a business major during their first term in residence or as soon as they have met the admission criteria.
(3) Application for admission must be made by the last day to register as published in the Time Schedule for the current term. If the application is approved, admission will be effective the following term.
(4) Students will not be admitted as business majors during the summer term.
Degree Requirements: To qualify for a B.B.A. degree from the College of Business Administration, the student must complete all of the following general University requirements. For the B.S. or B.A. degree, please refer to the graduation requirements of the University, page 7 .
(1) General University Requirements: (a) 3 courses of at least 3 credit hours each in Arts and Letters courses (need not be in sequence nor same department) ; (b) 3 courses of at least 3 credit hours each in Social Science (need not be in sequence nor same department) ; (c) 3 courses of at least 3 credit hours each in Science (need not be in sequence nor same department) ; (d) an additional 3 courses of at least 3 credit hours each in either (a), (b), or (c) above, or in all three; (e) $\mathrm{Wr}_{r} 121$ and Wr 122 or Wr 123 , or their approved equivalents; (f) 5 terms of Physical Education and one term of Health Education; (g) 62 credit hours in upper-division work (any time and on any campus); (h) 45 credit hours beyond the first 126 hours must be taken on this campus in regular sessions to meet the residence requirements; (i) 90 graded hours of which a
minimum of 45 must be taken on this campus; ( j ) a minimum total of 186 credit hours.
Students pursuing a baccalaureate degree (B.B.A., B.S., B.A.) in business must complete the following business requirements.
(2) Conceptual Tools Core: Many of the courses in the Core are prerequisites to upper-division courses. Business students are urged to complete the Core before beginning the junior year. The following courses or their equivalents are required: Introduction to Micro-Economic Analysis (Ec 201), 3 credit hours ; Introduction to MacroEconomic Analysis (Ec 202), 3 credit hours; Intermediate Macro-Economic Analysis (Ec 375), 3 credit hours; Managerial Economics (Fin 332), 3 credit hours ; Introduction to Accounting (Ac 221), 3 credit hours ; Introduction to Business Statistics (QM 232), 3 credit hours ; College Algebra (Mth 101), 4 credit hours; Calculus for Nonphysical Science (Mth 207, 208), 8 credit hours; Introduction to Business Data Processing (CS 131), 4 credit hours ; 9 credit hours selected from sociology, psychology, and anthropology courses listed in the social science group ( 3 courses of at least 3 credit hours each) ; Fundamentals of Speech ( RhCm 121), 3 credit hours; Introduction to Law (BE 226), 3 credit hours. Environment of Business (BE 125) and Introduction to Management (Mgt 199) are not required, but business students are urged to select one of them as an elective. (Students who plan to attend, or are attending, another college prior to transferring to the University are urged to consult the College of Business Administration for advice on on equivalent courses and on admissions policy.)
(3) Residence Requirement: Students must take 45 credit hours of upperdivision work in Business on this campus. Upper-division work taken at another institution does not satisfy this requirement unless the course is taken under the instruction of a College of Business Administration faculty member acting as an exchange professor at that institution. Lower-division work does not satisfy this requirement. (4) Studies in Business and Economics: Students must take at least 72 credit hours of work in business and economics courses ( 40 per cent of the total program requirements).

## (5) Studies in Other Disciplines:

Students must take at least 72 credit hours ( 40 per cent of total program) of work outside of business and economics courses.
(6) Upper-Division Core: The following courses are required (3 credit hours, each course) : Managerial Accounting (Ac 323) ; Financial Management (Fin 316) ; Marketing Systems and Demand Analysis (Mkt 311) ; Management and Organizational Behavior (Mgt 321) ; Operations and Systems (Mgt 329) ; Elementary Inference in Business Statistics (QM 333) ; Business Policies (Mgt 453).
(7) Major Option in the College of Business Administration. Each student must complete the requirements of one of the major options as specified by the departments.
(8) Grade Point Requirements: To qualify for the baccalaureate degree in Business Administration, the student must earn at least a 2.5 cumulative GPA in all graded courses taken at the University of Oregon or at any other institution of higher education.
Student Advising: The College of Business Administration maintains an advising service for the business student. Information and advice about both admissions and degree requirements status are provided by the Student Advising Office (Room 271 Gilbert). Throughout the year specially selected graduate students work with prebusiness and business majors to help them plan programs that will lead to admission at the end of the sophomore year and to graduation at the end of the senior year. Students also have faculty advisers who work with them concerning content of specific courses and programs that will help attain career objectives. A list of faculty advisers and their areas of specialization is provided in the CBA Student Advising Office so that students may choose their own adviser when they choose their major option.

Before students are formally admitted to the CBA they are urged to register as prebusiness majors so that an up-to-date transcript is on file in the Advising Office. During the term in which students gain senior standing, they should review their files with the Student Advising Office in order to plan the last year, and to insure that all requirements for graduation will be completed. All other students should review their files with an adviser at least once a year.
Grading: The University has reinstated the D grade which indicates "inferior performance." For undergraduates, the College of Business recognizes the D grade as "passing" on the passdifferentiated (graded) option. However, a D grade on the pass-
undifferentiated (ungraded) option is a "no pass" (N). Please refer to the Enrollment and Academic Regulations section (page 4) for detailed information regarding the grading system.

## Supporting Studies in Business:

 Students not formally admitted to the College of Business Administration may wish to elect a modicum of courses in business to supplement a major program from another area of the University. As business and industry employ many nonbusiness majors, the opportunity for students to find entry level employment may be greatly enhanced by the election of supportive studies in business.Students who want to supplement a major program from another area of the University with supportive studies in business should take the following courses:
(1) General Background Courses: the following lower-division courses are of a general nature and are designed to introduce the student to some of the key issues related to the management of personal and organizational business affairs ( 3 credit hours, each course) : Environment of Business (BE 125) ; Introduction to Management (Mgt 199) ; Personal Economic and Financial Planning (Fin 281) ; The Stock Market and Investing (Fin 283).
(2) Business Supportive Core: The following courses are strongly recommended for students who want a business supplement to a major program from another area of the University ( 3 credit hours, each course) : Introduction to Law (BE 226) ; Marketing Systems and Demand Analysis (Mkt 311) ; Interpersonal Relations (Mgt 321); Operations and Systems (Mgt 329) ; Introduction to Accounting (Ac 221); Managerial Accounting (Ac 323); Financial Management (Fin 316). Each course may be taken independently of the others except for Ac 221, Ac 323, and Fin 316 which must be taken in that order. Introduction to Micro-Economic Analysis (Ec 201) and Introduction to Macro-Economic Analysis (Ec 202) are reconmended as prerequisites for all the 300 -level courses listed in the Business Supportive Core.
(3) Analytical and Quantitative Courses: In addition to the courses listed in the Business Supportive Core, it is recommended that students develop their analytical and quantitative skills by completing the following courses: College Algebra (Mth 101), 4 credit hours; Introduction to Business Data Processing (CS 131), 4 credit hours; and Elementary Statistics (Mth 425), 3 credit hours, or Introduction to Statistics (QM 232), 3 credit hours.


## Accounting and <br> Quantitative Methods

## Faculty

Paul Frishkoff, Ph.D., Department Head, Associate Professor of Accounting. B.A., Swarthmore, 1960 ; M.B.A., Chicago, 1962 ; C.P.A., States of California and Oregon; Ph.D., Stanford, 1970.
Van Ballew, Ph.D., Assistant Professor of Accounting. B.B.A., 1972, Ph.D., 1977, Houston ; C.P.A., State of Texas. Robert G. Bowman, Ph.D., Assistant Professor of Accounting. B.A., Pomona College, 1962 ; M.S., San Diego State, 1969 ; Ph.D., Stanford, 1978 ; C.P.A., State of California.
Gerald J. LaCava, Ph.D., Assistant Professor of Quantitative Methods. B.S., Seattle University, 1966; M.A., 1968, M.B.A., 1971, Ph.D., 1971, Kansas.
Larry Lookabill, Ph.D., Assistant Professor of Accounting. B.S., Portland State, 1968; M.B.A., Washington, 1969 ; Ph.D., Stanford, 1975 ; C.P.A., State of Oregon.
Chris J. Luneski, Ph.D., Associate Professor of Accounting. A.B., Johns Hopkins, 1956; M.A., 1959, Ph.D., 1965, Minnesota.
James E. Reinmuth, Ph.D., Professor of Quantitative Methods and Dean. B.A., Washington, 1963 ; M.S., 1965, Ph.D., 1969, Oregon State.
Larry E. Richards, Ph.D., Associate Professor of Quantitative Methods. B.A., 1962, M.B.A., 1963, Washington ; Ph.D., California, Los Angeles, 1969. Barry Spicer, Ph.D., Assistant Professor of Accounting. B.Com., Queensland, 1970 ; Ph.D., Washington, 1976. Bert M. Steece, Ph.D., Assistant Professor of Quantitative Methods. A.B., 1967, A.M., 1969, Ph.D., 1974, Southern California.

## Faculty Emeriti

Arthur E. Mace, Ph.D., Professor Emeritus of Quantitative Methods. B.A., Amherst, 1938 ; Ph.D., Chicago, 1947; at Oregon since 1964.
John W. Soha, M.B.A., C.P.A., Associate Professor Emeritus of Accounting. B.B.A., Puget Sound, 1936; M.B.A., Michigan, 1950 ; C.P.A., State of Washington, 1942 ; at Oregon since 1951.

Programs in accounting are designed to prepare students for careers in industrial, professional, and governmental accounting. The quantitative methods option is designed to provide students
with an understanding of the theory and techniques of quantitative analysis as a basis for administrative decisionmaking.
Accounting. The major curriculum in accounting is designed to educate students who want to prepare for a career in public, corporate, or governmental accounting or who want to embark on a management career with a strong accounting emphasis.

Permission to enroll in accounting courses numbered Ac 350 and 360 is based on a minimum grade received in Ac 221, 222, and 323 (or equivalents as approved by the accounting department). Students who earn an A or a B in Ac 221, 222, and 323 will be eligible to take Ac 350 and 360 . Those students who do not have an A or a B in these three courses may satisfy the eligibility requirement by scoring at the 50 th percentile or better on the uniform national achievement test of the American Institute of Certified Public Accountants; this examination is offered on campus several times a year. Petitions will be considered from other applicants.
For courses numbered Ac 350 or above, a D is not a satisfactory grade for continuing in subsequent courses; a student may repeat once one of the courses in which a D was earned. Repeated grades of $D$ or a grade of $F$ or N wil normally disqualify a student from further study in accounting.

Requirements in addition to the general business requirements of the school total 40 credit hours including at least 24 upper-division credit hours in residence, distributed as follows (3 credit hours, each course except Ac 407), Financial Accounting (Ac 222); Financial Accounting Theory (Ac 350, 351, 352) ; Cost Accounting (Ac 360) ; Introduction to Income Taxation (Ac 411) ; 6 hours of advanced Quantitative Methods, as approved by the student's accounting faculty adviser: QM 432, 407 (Sampling or Linear Systems), either QM 433 or 434 ; Introduction to Aucliting (Ac 440) ; Advanced Accounting (Ac 450) ; Cost Analysis (Ac 460) ; Information Systems : 3 additional hours as approved by the student's accounting faculty adviser ; 3 hours of elective accounting courses, to be approved by the student's accounting faculty adviser ; Accounting Cycle (Ac 407, 1 hour).
All accounting majors who plan to take the Uniform CPA examination are advised to take additional business law courses beyond (BE 226.)

Quantitative Methods: The major program in quantitative methods is
designed to prepare the student for a career in data analysis for business problems; primary emphasis is on the application of modern statistical and quantitative methods to business problems. Majors in quantitative methods must complete work in basic mathematics through calculus (equivalent of Mth 201, 202, 203, or Mth 204, 205, 206). Additional courses in mathematics, accounting, and quantitative methods in economics or other social sciences are highly recommended. The major requirements, in addition to the general business requirements of the College, totaling 24 credit hours, are as follows ( 3 credit hours, each course) : Linear Systems (QM 407) ; Time-Dependent Processes (QM 440) ; Quantitative Analysis for Business Decisions (QM 432) ; Applied Analysis of Variance (QM 433) ; Applied Regression Analysis (QM 434) ; Sampling Methods (QM 407). minimum of 9 credit hours selected from electives listed below.

Electives (3 credit hours, each course) : Business Fluctuations and Planning (Fin 436) ; Cost Accounting (Ac 360) ; Cost Analysis (Ac 460) ; Industrial Dynamics (QM 421); Financial Analysis (Fin 472) ; Marketing Research (Mkt 460) ; Operations Research Techniques (Mgt 330) ; Intermediate Economic Analysis (Ec 377) ; Econometrics (Ec 493, 494, 495) ; Dynamic Systems (QM 420) ; Introductory Linear Algebra (Mth 411) ; Introduction to Statistical Theory (Mth 441, 442) ; Regression Analysis (Mth 443).

## Accounting

## Undergraduate Courses

Ac 221. Introduction to Accounting. 3 credit hours. Description and derivation of financial statements prepared by accountants; accounting rationale; primary emphasis placed on reports to stockholders and other investors; an introduction to other courses, and a oneterm terminal course in financial accounting. Prerequisite : sophomore standing.
Ac 222. Financial Accounting. 3 credit hours. Continuation of Ac 221. Problems faced by the financial accountant in determining figures to be reported for monetary and nonmonetary assets; related problems in reporting ownership interests; analysis of financial statements. Prerequisite : Ac 221, sophomore standing.
Ac 323. Managerial Accounting. 3 credit hours. Introduction to development, presentation, and interpretation of accounting data to aid management in planning and controlling operations. Prerequisite : Ac 221, QM 232, Mth 208, sophomore standing.
Ac 350, 351, 352. Financial Accounting Theory. 3 credit hours each term. Review of financial statements provided to investors; review of accounting recording and reporting
techniques and procedures. Examination of basic accounting principles and concepts underlying asset valuation and income determination. These courses must be taken in sequential order. Prerequisite : for Ac 350 is Ac 222, Ac 323, junior standing, and consent of instructor. Prerequisite for Ac 351 is Ac 350.

## Ac 360. Cost Accounting. 3 credit hours.

 Development, presentation, and interpretation of cost information for management ; methods of data collection and display; problems of cost allocation; standard costs for control. Prerequisite : one year of college mathematics, CS 131, QM 232, Ac 222, Ac 323, junior standing.Ac 401. Research. Credit hours to be arranged.
Ac 403. Thesis. Credit hours to be arranged. Ac 405. Reading and Conference. Credit hours to be arranged.
Ac 407. Seminar. Credit hours to be arranged. Ac 409. Practicum. 1-2 credit hours.

## Upper-Division Courses Carrying Graduate Credit

Ac 411. Introduction to Income Taxation. (G) 3 credit hours. Designed for accounting majors and other majors alike. Intended to develop an understanding of the law, with emphasis on taxation of individuals; familiarity with income tax procedures ; introduction to tax research. Prerequisite: Ac 323, senior standing.
Ac 412. Federal Income Tax Procedure. (G) 3 credit hours. Study of the taxation of corporations and shareholders. Intended to develop an understanding of the law, as well as an awareness of its inherent uncertainties; advanced tax research. Prerequisite : Ac 411, senior standing.
Ac 420, 421. Management Information Systems. (G) 3 credit hours each term. Study and analysis of information models for the management of complex organizations; secondary research on problems arising from indiscriminate mechanization of natural systems; generalized definitions of management information; adjustment to particularized definitions; total-systems flow charting; primary research into particularized information systems. Prerequisite: Ac 360, CS 131 ; senior standing, or consent of instructor. Ac 421 not offered 1978-79.
Ac 430. Accounting in Nonprofit Organizations. (G) 3 credit hours. Depending on instructor, Ac 430 will focus on either (1) financial administration and accountability in nonprofit organizations and institutions emphasizing the use of fund accounting, or (2) management control of nonprofit organizations and institutions emphasizing the development and use of accounting data for the purposes of allocating resources and measuring performance. Prerequisite: Ac 222 , Ac 323 , junior standing.
Ac 440. Introduction to Auditing. (G) 3 credit hours. A general perspective of the following : financial statement examinations, audit process and environment, the audit profession, professional standards, and audit sampling. May be taken concurrently with Ac 352 or after completion of Ac 352.
Ac 441. Auditing Concepts and Procedures. (G) 3 credit hours. A continued study of auditing literature but with more emphasis on application. Special emphasis on audit programming, and audit strategy in an EDP environment. Prerequisite: Ac 440.
Ac 450. Advanced Accounting. (G) 3 credit hours. Financial accounting concepts and analyses relating to partnerships, alternative
forms of combined corporate entities, and international operations. Contemporary issues in financial reporting. Prerequisite : Ac 352, senior standing.
Ac 451. Special Topics in Accounting. (G) 3 credit hours. Concepts, analyses, and methodology, applicable to fiduciary, institutional, and social accounting systems. Contemporary topics of accounting research. Content varies depending on interests of students and of instructor. Prerequisite : Ac 450. Not offered 1978-79.

Ac 460. Cost Analysis. (G) 3 credit hours. The use of accounting information for managerial decision making, planning, and control. Includes a consideration of cost-volumeprofit analysis and linear programming, capital budgeting, inventory models; and the use of standards, budgets, and variance analysis for planning and control purposes. Divisional performance evaluation and transfer pricing issues. Prerequisite : Ac 360, CS 131, senior standing.

## Ac 480, 481. Problems in Professional

Accounting. (g) 3 credit hours each term. Ac 480 : Review of various topics relating to the Uniform Examination for Certified Public Accountants, the CMA Examination, and other professional designations. Prerequisite : consent of instructor. Ac 481 : Lectures and readings dealing with career choices and alternatives: public accounting practice; function of the controller, industrial accounting, governmental accounting ; nonaccounting careers; personnel and client relationships, individual goals, and choice points. Term paper required. Prerequisite : 9 credit hours of accounting, junior standing.

## Quantitative Methods

## Undergraduate Courses

QM 232. Introduction to Business Statis-
tics. 3 credit hours. Elementary statistics as a tool for business decision-making. Introduction to probability, sampling distributions, estimation including confidence inter vals, and hypothesis testing. Prerequisite : Mth 208.
QM 333. Elementary Inference in Business
Statistics. 3 credit hours. Applications of statistical inference to business situations; sampling and its role in estimation and hypothesis testing. In addition, an introductory treatment of the following techniques or areas is presented; decision theory, regression, experimental design, and nonparametric statistics. Prerequisite : Mth 208, QM 232.
QM 401. Research. Credit hours to be arranged.
QM 403. Thesis. Credit hours to be arranged.
QM 405. Reading and Conference. Credit hours to be arranged.
QM 407. Seminar. Credit hours to be arranged.
Independent Study.
QM 409. Practicum. 1-2 credit hours.
QM 432. Quantitative Analysis for
Business Decisions. 3 credit hours. The use of probability theory and utility functions to evaluate risk, information, and alternatives in decision problems. Comparative analysis of decision problems under uncertainty using classical statistics and Bayesian statistics. Prerequisite : Mth 208, QM 333, or equivalent.

## Upper-Division Courses

 Carrying Graduate CreditQM 420. Dynamic Systems. (G) 3 credit hours. Fundamental concepts in the analytical
study of dynamic processes and concepts in the analytical study of dynamic processes and systems. Different equations which have important applications in the simulation of industrial and economic systems. Prerequisite Mth 208, or equivalent.
QM 421. Industrial Dynamics. (G) 3 credit hours. Analysis of information-decision systems in business organizations; development of competence in modeling the dynamic operations of such systems, in performing simulation experiments, and in analyzing results. Prerequisite : QM 420, or consent of instructor.
QM 433. Applied Analysis of Variance.
(G) 3 credit hours. Design of comparative experiments in business administration; models and methods for analysis of variation in measurement data including single and multifactor treatments in completely randomized and blocked designs. Prerequisite : one year of college mathematics ; QM 333, or equivalent.
QM 434. Applied Regression Analysis. (G) 3 credit hours. The general theory of leastsquares regression. Application of regression procedures in the elucidation of underlying relationships governing business and economic behavior. Techniques of statistical model-building and model-verification. Commonly available computer programs are employed. Prerequisite : Mth 208, QM 333, or equivalent.
QM 440. Time-Dependent Processes. (G) 3 credit hours. The theory and application of time series models to forecasting problems. Elements of spectral analysis, autoregression, moving average, and seasonal models. Principles of iterative model-building : identification, fitting, and diagnostic checking of models. Examples from business and economics are used to illustrate each model. Prerequisite : Mth 208, QM 333, or equivalent.

## Finance

## Faculty

Paul Swadener, D.B.A., Department Head, Associate Professor of Finance (insurance, finance management). B.S., 1960, М.B.A., 1962, D.B.A., 1968, Indiana.

Thomas W. Calmus, Ph.D., Associate Professor of Business Economics (managerial economics). B.A., Sacramento State, 1957 ; Ph.D., California, 1966.

Larry Dann, M.B.A., Assistant Professor of Finance (financial management, investments). B.S., Northwestern, 1967 ; M.B.A., Harvard, 1969.
Jerome J. Dasso, Ph.D., H. T. Miner Professor of Finance (real estate, urban development). B.S., Purdue, 1951 ; M.B.A., Michigan, 1952 ; M.S., 1960, Ph.D., 1964, Wisconsin ; A.I.P., 1969, S.R.P.A., 1971.
Michael H. Hopewell, Ph.D., Associate Professor of Finance (financial management, investments). B.A., 1963, M.B.A., 1967, Ph.D., 1972, Washington.
Austin Jaffe, Ph.D., Assistant Professor of Finance and Real Estate (finance, real estate). B.S., 1974, M.S., 1975, Ph.D., 1978, Illinois.
George G. Kaufman, Ph.D., John B. Rogers Professor of Banking and Finance ; Director, Center for Capital Market Research (financial institutions). B.A., Oberlin, 1954 ; M.A., Michigan, 1955 ; Ph.D., Iowa, 1962.
Richard W. Lindholm, Ph.D., Professor of Finance (taxation). A.B., Gustavus Adolphus, 1935 ; M.A., Minnesota, 1938; Ph.D., Texas, 1942.
George A. Racette, Ph.D., Associate
Professor of Finance (financial management, theory). B.A., Stanford, 1966 ; M.B.A., Michigan, 1967 ; Ph.D., Washington, 1972.
Donald A. Watson, Ph.D., Professor of Business Economics (urban and regional development). B.A., 1947, M.A., 1948, Ph.D., 1951, Iowa.

This department offers two major options: Finance and Real Estate, and courses in the related fields of Insurance, Business Economics, and Public Finance and Taxation.

Finance: The finance curriculum is designed to impart an understanding of the various areas and principles of finance and to provide students with a body of specialized knowledge and
analytical techniques. Courses are offered in the areas of financial institutions, financial management, and investments. The courses provide an understanding of the application of business financial analysis and decisionmaking to the solution of problems of business management. Special attention is given to the relation of financial policies and operations to the functioning of business firms within the economic system.

In addition to the general requirements of the College of Business, requirements for a major in Finance are 18 credit hours, and consist of the following courses ( 3 credit hours each) : Financial Accounting (Ac 222) ; Financial Systems (Fin 314) ; Investments (Fin 380) and 9 credit hours of electives of which at least 3 hours must be in either Problems in Financial Management (Fin 470) or Financial Analysis (Fin 472) and the balance chosen from Commercial Bank Management (Fin 460), Analysis of Financial Institutions (Fin 462) and Investment Management (Fin 482).
Real Estate: The option in real estate is designed to provide professional training in the development, financing, marketing, and management of real estate. Required courses, in addition to the general requirements of the College of Business, are ( 3 credit hours, each course) : Financial Systems (Fin 314) ; Introduction to Real Estate (Fin 341); Real Estate Finance (Fin 446G) ; and either Real Estate Environmental Analysis (Fin 442G) ; or Real Estate Law (Fin 440G) ; and 6 credit hours of elective Real Estate courses.

## Undergraduate Courses

Fin 199. Special Studies. 1-3 credit hours.
Fin 281. Personal Economic and Financial Planning. 3 credit hours. Personal financial planning for achieving financial objectives. Analysis of alternative savings outlets, including insurance, pension funds, deposits at commercial banks, deposits at thrift institutions, investment of real estate, stock and mutual fund ownership. Analysis of costs and terms of alternative sources of credit, including charge cards, consumer credit, bank loans, mortgages, and finance company loans. Not open to upper-division majors in business. Prerequisite: sophomore standing.

## Fin 283. The Stock Market and Investing.

 3 credit hours. A study of various investments and the stock market ; elementary analysis of securities and approaches to security selection. Not open to upper-division majors in business. Prerequisite : sophomore standing.Fin 314. Financial Systems. 3 credit hours. Study of the financial system of the U.S. emphasizing functions and behavior of financial markets and institutions. Analysis of the
nature and functions of money and credit and their interrelationship with income, employment, the price level, and the balance of payments. Discussion of interest rates and financial instruments. Analysis of the Federal Reserve System and the conduct and impact of monetary policy on business environment. Prerequisite: Ec 202 or equivalent, junior or senior standing.
Fin 316. Financial Management. 3 credit hours. Policies and practices required to plan and control the sources and uses of a firm's funds ; emphasis on formulation, implementation, and modification of corporate financial policies ; management of liquid assets; selection among alternative investment opportunities ; funds acquisition ; dividend policies; determination of the optimal debt-equity mix. Economic, accounting and statistical tools and concepts studied and related to the decision-making process. Prerequisite : Ac 323 , junior or senior standing.
Fin 323. Taxation Topics. 3 credit hours. Each term of the academic year a different selection of taxes and taxation issues are considered. The selections in the past have included value-added tax, taxation of foreign operations, the land-value tax, finance of education, and local government. Issues considered include the effect of the tax system on monopoly, balance-of-payments, economic development, environment, urban planning, and financing education. The course is also offered as Fin 407 for those who wish to consider more than one group of tax topics. Prerequisite: Ec 201, Ec 202, junior or senior standing.
Fin 332. Managerial Economics. 3 credit
hours. Develops the basic tools of microeconomics and applies them to problems encountered in the management of any organization. Microeconomic analysis is developed as an integrated system of practical tools with which managers can analyze and solve problems in marketing, pricing, finance, accounting, taxation, production, organization systems analysis and public policy. The main emphasis is on the understanding of the basic theoretical concepts, their empirical measurement, and their application to real problems. Prerequisite: Ec 201, Mth 208, junior or senior standing.
Fin 341. Introduction to Real Estate. 3 credit hours. Real estate principles and practices, with special emphasis on urban land-use analysis; nature of real property and property rights; organization of the realestate industry and real estate markets ; the urban spatial structure and location analysis; land-use competition ; management of real properties; subdivision and land development ; real estate financing; the impact of government policies upon the real estate industry. Prerequisite : Fin 316, junior or senior standing.
Fin 354. Risk and Insurance. 3 credit hours. Introduction to business insurance. Course topics include the basic principles of insurance from the viewpoint of the risk manager for the family business, corporation, and public organization. Other subjects studied are risk identification and evaluation, and measurement of need for protection; ways of handling risk, and insurance as a risk-handling device ; insurance buying, including evaluation of cost ; company and agent selection; types of insurance including life, health, automobile, homeowner's, specialty consumer coverages. Prerequisite: Fin 316 , junior or senior standing.
Fin 380. Investments. 3 credit hours. Study of the economic and investment environment as it relates to security investment decisions;
appraisal of investment characteristics; introductory security analysis ; the determination of investment objectives, and the selection of portfolio policies for individual and institutional investors. Prerequisite: Fin 316, junior or senior standing.
Fin 401. Research. Credit hours to be arranged.
Fin 403. Thesis. Credit hours to be arranged
Fin 405. Reading and Conference. Credit hours to be arranged.
Fin 407. Seminar. Credit hours to be arranged.
International Taxation.
Payroll Tax and Transfer Payments.
Venture Finance.
Real Estate Taxation.

## Fin 409. Practicum. 1-2 credit hours.

Fin 436. Business Fluctuations and Planning. 3 credit hours. Description of economic forces causing change in aggregate business activity, and analysis of the effects of these changes on individual business decisions. Examination of business forecasting as affected by other business firms' actions and government decisions and policy. Prerequisite: Ec 375, junior or senior standing.
Fin 460. Commercial Bank Management. 3 credit hours. Practices, policies, and problems of commercial bank management and operation ; loan and investment administration; regulation and supervision; earnings, expense, and dividend policies; the economic and social importance of the commercial banking system as the center of the American financial system. Prerequisite : Fin 314, junior or senior standing.
Fin 462. Analysis of Financial Institutions. 3 credit hours. Study of both the similarities and the unique characteristics of different types of financial institutions, examination of sources and use of funds; analysis of management of assets, liabilities and capital ; description of regulatory and legal environment. Prerequisite: Fin 314, junior or senior standing.

## Fin 470. Problems in Financial Manage-

 ment. 3 credit hours. Analysis of selected problems in financial management of the firm, including short- and long-term financial requirements, trade credit analysis, special media of finance, capital budgeting, and profit analysis. Research project and analysis of cases. Prerequisite : Fin 316, junior or senior standing.Fin 472. Financial Analysis. 3 credit hours. Analysis of the financial aspects of complex business problems; concepts of interest and opportunity cost; time value of money and valuation of various income streams; methods of evaluating and ordering investment alternatives; concepts of certainty, certaintyequivalent, and uncertainty related to financial decision making; the theory of financing business firms. Prerequisite : Fin 316, junior or senior standing.
Fin 482. Investment Management. 3 credit hours. Capital market theory, portfolio selection and evaluation. Development of the parameters of security analysis. Development of investor objectives and risk constraints. Prerequisite : Fin 380, junior or senior standing.

## Upper-Division Courses Carrying Graduate Credit

Fin 440 . Real Estate Law. (G) 3 credit hours. Legal aspects of real property for owners, managers and lenders: sales fixtures, brokerage, co-ownership, deeds and convey-
ances, easements, trust deeds and mortgages, liens and leases, land-use controls. Prerequisite : BE 226, junior or senior standing.
Fin 442. Real Estate Environmental Analysis. (G) 3 credit hours. Market and feasibility analysis for development of, or investment in, real estate ; planning and zoning related to current land-use practices and problems, and to property development and utilization. Effective policy-making for guiding and controlling land use is considered relative to public and private goals and objectives. Prerequisite : Fin 341, or consent of instructor, junior or senior standing.

## Fin 444. Property Development. (G) 3

 credit hours. Property development considered as a process from raw land to productive space ; includes market analysis, site selection, land-use planning, arranging for utilities and services, financing and budgeting, public and private controls; commercial, industrial, residential, and multiple uses of property considered. Prerequisite: Fin 341, junior or senior standing.Fin 446. Real Estate Finance. (G) 3 credit hours. The sources and use of credit for home ownership or real estate investing ; instruments and legal terms of real estate finance ; emphasis on mortgages, trust deeds, and land contracts ; the organization and operation of public and private financial institutions relative to commercial, industrial, and residential properties ; and the role of mortgage lending in our economy. Prerequisite: Fin 341, Fin 316 or equivalent, or consent of instructor, junior or senior standing.
Fin 447. Real Estate Investment Analysis. (G) 3 credit hours. Analysis of influence of depreciation, leverage, taxes, and holding period on investment value of property and on the rate of return to equity. Investment strategies
for selection among alternative real estate investments. Prerequisite : Fin 446 or consent of instructor, junior or senior standing.
Fin 448. Real Estate Valuation. (G) 3 credit hours. Theory and technique of real estate appraising; the appraisal process; analysis of factors influencing real estate values with an emphasis on income properties ; leasehold valuation ; trends in appraisal procedures and techniques. Prerequisite : Fin 446 or consent of instructor, junior or senior standing.
Fin 455. Business Insurance and Risk Managements. (G) 3 credit hours. Management of insurable risks in the firm from the viewpoint of the finance manager and the business consumer of insurance. Analysis of methods of reducing business risks ; financial impact on profits of risk and risk handling methods; major contracts of insurance ; company and agent selection ; placement of problem risks; loss adjustment. Prerequisite: Fin 354, or consent of instructor, junior or senior standing. Not offered 1978-79.
Fin 458. Social Insurance. (G) 3 credit hours. Analysis of major social insurance programs. Emphasis on basic issues of benefit levels, financing methods, alternative proposals for change, and international comparisons. Prerequisite : Fin 354, junior or senior standing. Fin 323 is recommended. Not offered 1978-79.
Fin 474. Financial Management of the Multinational Firm. (G) 3 credit hours. The role of the Treasurer/Controller in a multinational firm. Response to devaluation/ reevaluations, investment criteria, financial arrangements, tax and transfer pricing issues Export/import financing. Text and cases. Prerequisite : Ec 323, junior or senior standing, or consent of instructor.


## Management

## Faculty

Janes L. Koch, Ph.D., Department Head, Associate Professor of Management (inclustrial relations, human resources management). B.A., San Francisco State, 1966 ; M.B.A., 1968, Pli.D., 1972, California, Los Angeles. Warren B. Brozen, Ph.D., Associate Dean, Graduate School; Professor of Management (organization theory, management). B.S., Colorado, 1955 ; M.S., Stanford, 1957 ; M.S., 1959, Ph.D., 1962, Carnegie-Mellon University
Eaton H. Conant, Ph.D., Professor of Management ; Director, Institute of Industrial and Labor Relations (industrial relations, labor economics). B.S., 1956, M.S., 1958, Ph.D., 1960, Wisconsin.
Catherine M. Jones, Ed.D., Associate Dean ; Associate Professor of Management (business education, office management). B.A., Iowa State Teachers, 1937 ; M.S., Oregon, 1945 ; M.Bus.Ed., 1952, Ed.D., 1964, Colorado.
Richard T. Mowday, Ph.D., Assistant Professor of Management (organizational behavior, organization theory). B.S., San Jose, 1970 ; M.S., 1972, Ph.D., 1975, California, Irvine. Kenneth D. Ramsing, Ph.D., Associate Professor of Management (operations management, management science). B.S., Oregon State, 1960 ; M.B.A., 1962, Ph.D., 1965, Oregon. Harold J. Schleef, Ph.D., Assistant Professor of Management (management science, production management). B.S., Valparaiso University, 1966; M.S., Oregon State, 1970 ; Ph.D., Chicago, 1977.
Frederick J. Seubert, Ph.D., Associate Professor of Management (human resources management, business policy). B.A., Baldwin-Wallace, 1942 ; B.M.E., Florida, 1946; M.B.A., Pennsylvania, 1947 ; Ph.D., Cornell, 1954. (On leave 1978-79.)

Leslie L. D. Shaffer, Ph.D., Associate Professor of Management (small business management, innovation in business). B.A., California, 1935 ; M.S., 1960, Ph.D., 1962, Illinois. Richard M. Steers, Ph.D., Director of Doctoral Studies; Associate Professor of Management (organization theory, organizational behavior). B.A.,
Whittier College, 1967 ; M.B.A., Southern California, 1968 ; Ph.D., California, Irvine, 1973.
Rosalie S. Y. Tung, Ph.D., Assistant Professor of Management (organiza-
tional behavior, organization theory). B.A., York, 1972 ; M.B.A., 1974, Ph.D., 1977, British Columbia.
Gerardo R. Ungson, M.B.A., Assistant Professor of Management (business policy; organization theory and behavior). A.B., Ateneo (Philippines), 1969 ; M.B.A., Pennsylvania State, 1973.

Myra T. Willard, B.A., Senior Instructor of Management, University Affirmative Action Officer (affirmative action implementation in management). B.A., Immaculate Heart, 1953.

## Faculty Emeriti

Edrein F. Beal, Ph.D., Professor Emeritus of Management (personmel, industrial relations). B.A., Ohio Wesleyan, 1931 ; M.S., 1951, Ph.D., 1953, Cornell; at Oregon since 1959.

The Department of Management offers a general management program designed to prepare men and women for careers involving managerial responsibility in public and private organizations. A variety of courses are available which focus on topics such as organizational behavior, human resources management, operations and systems, organizational design, and applied management. Specific courses and program requirements are available from the Management Department.

## Undergraduate Courses

Mgt 199. Special Studies. 1-3 credit hours. Introduction to Management. 3 credit hours. A basic survey in management theory with emphasis on the functional and task requirements of management. Specific topics include planning, staffing, controlling, leadership, and creativity in business organizations. Not open to juniors or seniors.
Mgt 321. Management and Organizational Behavior. 3 credit hours. Introduces the student of management to the nature and consequences of human behavior in work organizations. Topics to be covered include: the nature of organizations, contemporary models of organization design, work structuring, motivation and performance, group and intergroup behavior, influence processes, and planned change. Prerequisite : junior standing.
Mgt 322. Human Resources Management. 3 credit hours. Management of relations between an organization and its personnel; building and maintaining a productive work force and providing job satisfaction and career opportunity ; integration of functions related to personnel with operations; substantive issues in human resources management. Prerequisite : Mgt 321, or consent of instructor.
Mgt 329. Operations and Systems. 3 credit hours. An introduction to problems in the organization's production system; similarity of these problems to operational problems in other functional areas of the organization. Concepts and techniques, including at least those of linear programming, line balancing,
quality control, forecasting, and inventory control. Prerequisite : QM 232, Ac 323,
CS 131, junior standing.
Mgt 330. Operations Research Techniques.
3 credit hours. Application of scientific techniques to the solution of complex business problems through the quantitative comparison of alternatives ; linear programming, opportunity cost analysis, expected value analysis, decision-making process. Prerequisite : junior standing.
Mgt 331. Problems in Affirmative Action. 3 credit hours. An in-depth assessment of problems and issues in Affirmative Action with topical focuses on Title VII of the Equal Employment Opportunity Act and the Office of Federal Contract Compliance. The impacts of legislation on protected class populations; issues in recruiting, interviewing, and selection. Prerequisite : junior standing.
Mgt 333. Office Organization and Management. 2 credit hours. Management and organization of the office, with special attention to the scientific approach to analysis and control ; functional office layout and equipment ; place of automation in the office; planning, organizing, and controlling office services, such as correspondence, records management, communications. Prerequisite : junior standing.
Mgt 340. Small Business Management. 3 credit hours. The problems and the advantages in establishing and maintaining a small business enterprise. Attention is given to functions of management as they are utilized in small business, and the general principles of management as they apply. Project work is assigned to each student either in terms of : investigating and/or assisting a small entrepreneur in the area, or a research of library topic pertaining to the course subject.

## Prerequisite: junior standing.

Mgt 344. Management and Innovation. 3 credit hours. The creative process as it applies to business decision-making; the techniques available for generating and improving ideas. The process of technological innovation and the problems involved in supervising and encouraging creative individuals. The patent system in introduced. Practice is provided in developing new solutions to business problems. Prerequisite : junior standing.
Mgt 401. Research. Credit hours to be arranged.
Mgt 403. Thesis. Credit hours to be arranged. Mgt 405. Reading and Conference. Credit hours to be arranged.
Mgt 407. Seminar. Credit hours to be arranged.
Applied Innovations.
Business History.
Mgt 409. Practicum. Credit hours to be arranged.
Mgt 415. Psychology and Human Resources. 3 credit hours. Review of research on application of psychological principles to human problems of work organizations. Focuses on individual employee behavior and how such behavior influences organizational effectiveness. Topics covered include personality, motivation, job design, individualorganization linkages, performance evaluation, and reward system. Prerequisite : Mgt 321, QM 333, senior standing.
Mgt 416. Group Processes in Organizations. 3 credit hours. Examines the role of groups and group processes in work organizations. Topics covered include leadership, decision-making, and communication processes, as well as norms, conformity, and group cohesiveness. Throughout, emphasis will be placed on work group behavior as it influences
organizational performances. Prerequisite : Mgt 321 , senior standing.
Mgt 430. Problems in Operations Management. 3 credit hours. Methods of analysis for problems in operations management, designed to allow students practice in formulating and solving operational problems. Use of quantitative and qualitative tools and skills are required. Case studies or simulated modeling environments describe operation settings. Prerequisite : Mgt 329, senior standing.
Mgt 450. Management Decision Simulation. 3 credit hours. Operational gaming; students formulate strategies, make management decisions in production, marketing, finance. Laboratory, lectures, discussion. Beginning use of management games. Several years of company activity and decision-making are simulated. Draws on previous background in the functional areas of business. Prerequisite : senior standing in College of Business Administration. Ac 323, Fin 316, Mkt 311.
Mgt 453. Business Policies. 3 credit hours. Interdependence of the different departments of a business concern. Designed to provide an integrated view of business operations, and to provide the student with a basic grasp of policy problems in several industries. Relies on knowledge from the functional areas of business. Prerequisite: Mgt 321, Mgt 329,
Ac 323, Fin 316, Mkt 311, senior standing.
Mgt 455. Organization and Management. 3 credit hours. Introductory systems view of the field of organization and management. Focus on the important organizational and management processes and organizational design considerations; current topics in administration; future of management. Prerequisite : Mgt 321, Mgt 329, senior standing.

## Upper-Division Courses <br> Carrying Graduate Credit

Mgt 413. Compensation Administration.
(G) 3 credit hours. Development of wage and salary policies which contribute to motivation and control in organizations. Behavioral science and economic foundations of compensation. Institutional setting-collective bargaining, labor markets, and government regulations. Operating tools-job analysis, iob evaluation, and wage and salary surveys. Evaluation of wage incentives and management compensation. Prerequisite : Mgt 322, senior standing, or consent of instructor.

## Mgt 414. Employment Policies and

Practices. (g) 3 credit hours. Evaluation of problems arising in the employment relationship. Policy determination, with special emphasis on integrative solutions in collective bargaining and conflict resolution. Contemporary policy concerns: affirmative action, training for sequential careers ; planning; job design; values and organizational commitment. Case analysis. Prerequisite: Mgt 322, senior standing, or consent of instructor.

## Mgt 428. Operations Management and

 Inventory Control. (G) 3 credit hours. Introduces and analyzes a variety of mathematical models which have evolved in the area of production management. Primary emphasis on inventory-production models : economic order quantity models and dynamic lot-size models. Application of these models to functional areas of business other than production management. Prerequisite: senior standing.Mgt 429. Operations Planning and Control. (G) 3 credit hours. Examines the areas of aggregate production planning, facility location, growth and capacity expansion, project scheduling, and job scheduling. Although the emphasis will be on application to production management, additional application of these
models will be made to other areas of business. Mgt 329, senior standing.
Mgt 439. Collective Bargaining. (G) 3 credit hours. Relations between unions and management, mainly at the level of the enterprise, under existing law and custom. Negotiations of the labor agreement; grievance handling and agreement administration; arbitration. Prerequisite : senior standing.
Mgt 476. Case Problems in International Business .(G) 3 credit hours. Determinants of foreign business decision making in light of case studies; operation versus licensing; control versus joint venture; problems of taxation, labor, and marketing; partners-inprogress approach ; skill formation, managerial training, cooperation with national planning authorities, public development banks and industrial corporations; emphasis throughout upon the individual business unit. Prerequisite: Mkt 475, Fin 474, or consent of instructor.
Mgt 480. Development of Management Thought. (G) 3 credit hours. The evolution of management thought in the changing American business and social environment since the colonial period; study of business firms and businessmen at critical times in their development; analysis of theories of management as applied to individual business firms. Prerequisite : Mgt 321, senior standing.

## Marketing, Transportation, and Business Environment

## Faculty

Donald S. Tull, Ph.D., Department Head, Professor of Marketing (marketing management, research and analysis). B.S., 1948, M.B.A., 1949, Ph.D., 1956, Chicago.
Gerald S. Albaurn, Ph.D., Professor of Marketing (marketing research and analysis ; international marketing). B.A., 1954, M.B.A., 1958, Washington ; Ph.D., Wisconsin, 1962.
Delbert I. Hawkins, Ph.D., Associate Professor of Marketing (marketing research and analysis, consumer behavior ). B.B.A., 1966, M.B.A., 1967, Ph.D., 1969, Texas.
Stuart U. Rich, D.B.A., Professor of Marketing ; Director, Forest Industries Management Center. B.A., Wabash, 1942 ; M.B.A., 1950, D.B.A., 1960, Harvard.
William J. Robert, LL.M., Professor of Business Law (general business law, international law). B.A., 1939, LL.B., 1941, Oregon; LL.M., New York University, 1957.
Lazerence W. Ross, Jr., J.D., Associate
Professor of Business Law (legal philosophy). A.B., 1949, M.A., 1949, Syracuse; J.D., Chicago, 1952.
Roy J. Sampson, Ph.D., Professor of
Transportation (transportation and public utility economics, management and policy). B.S., 1946, Tennessee Technological University; M.B.A., 1948, Ph.D., 1951, California, Berkeley.
Norman R. Smith, Ph.D., Associate Professor of Marketing (consumer behavior; marketing communications). B.A., 1948, M.A., 1959, Alberta ; Ph.D., Michigan State, 1965.
Scott Smith, M.B.A., Assistant Professor of Marketing (consumer behavior, marketing management, retailing).
B.S., Brigham Young, 1971; M.B.A., Michigan State, 1973.
Harold K. Strom, Ph.D., Associate Dean, Associate Professor of Transportation ; Director, Center for International Business Studies (transportation and business logistics). B.A., 1957, M.B.A., 1958, Washington ; Ph.D., California at Los Angeles, 1964.
Gerald G. Udell, Ph.D., Associate Professor of Marketing ; Director, Experimental Center for the Advancement of Invention and Innovation. B.S.E., 1962, M.B.A., 1965, Ph.D., 1972, Wisconsin.
M. Venkatesan, Ph.D., Professor of

Marketing ; Director, Bureau of

Business Research (consumer behavior, marketing research). B.Com., Bihar, 1959 ; M.S., 1962, Ph.D., 1965, Minnesota.
John R. Wish, Ph.D., Associate Professor of Marketing (marketing policy and analysis, consumerism). B.S., 1956, M.B.A., 1962, Ohio State ; Ph.D., Michigan State, 1967.

Faculty Emeriti
Nezvel H. Comish, Ph.D., Professor Emeritus of Business Administration. B.S., 1911, M.S., 1915, Utah State ; Ph.D., Wisconsin, 1928; at Oregon since 1932.
Alfred L. Lomax, M.A., Professor Emeritus of Business Administration (Pacific Northwest industrial history). B.B.A., Oregon, 1923 ; M.A., Pennsylvania, 1927 ; at Oregon since 1919. W. Drvaine Richins, Ph.D., Associate Professor Emeritus of Business Economics (business philosophy; business ethics; business environment). B.A., Brigham Young, 1936; M.B.A., Louisiana State, 1938 ; Ph.D., Washington, 1950 ; at Oregon since 1949.

The educational objectives of the Department of Marketing, Transportation, and Business Environment are:
(1) to develop the student's understanding of the environment in which the firm operates; (2) to give the student an understanding of the interrelationshpis of marketing and transportation with the other areas of operation of the firm ; (3) to provide the student with the opportunity to apply the functions of management and to obtain experience in decisionmaking in the areas of marketing and transportation; and (4) to enable the student to develop a capacity for research and analysis of basic problems in these areas

The department offers major options in marketing, transportation, and business environment.

Marketing: The option in marketing is designed to provide preparation for careers in the complex of functions relating the producer and the consumer. There are opportunities for student emphasis on marketing management, marketing research, consumer behavior, and foreign marketing. Special attention is given to the contributions of the behavioral sciences and of quantitative methods to the study of marketing. The program includes detailed study of the application of principles of management analysis to marketing problems.

Students majoring in marketing are
strongly encouraged to satisfy the College of Business behavioral-science course requirement by taking at least two courses in one field (psychology, sociology, or anthropology).
The major requirements, in addition to the above and the general business requirements of the school, total 18 credit hours, distributed as follows (3 credit hours, each course) : Marketing Management (Mkt 360) ; Analysis of Consumer Behavior (Mkt 361) ; Marketing Research (Mkt 460) ; Marketing Problems (Mkt 464) ; a minimum of 6 credit hours of the electives listed below, ( 3 credit hours, each course).

Retail Administration (Mkt 365) ; Seminars in Marketing (Mkt 407) ; Marketing Communications (Mkt 462) ; Industrial Marketing (Mkt 469) ; International Marketing Management (Mkt 475 ) ; Business Logistics (Trn 350) Business Enterprise and Social Responsibility (BE 425).
Transportation and Business Logistics: This option is designed to prepare students for careers with transportation or utility companies, for traffic or physical distribution (logistics), positions with industrial or commercial firms or trade associations, and for government positions with regulatory or logistics agencies or publicly owned utilities. The major requirements, in addition to the general business requirements of the school, total 15 credit hours, distributed as follows (3 credit hours, each course) : Transportation and Distribution Systems (Trn 349 ) ; Business Logistics (Trn 350) ; International Transportation and Distribution Systems (Trn 351) ; Transportation Administrative Law ( $\operatorname{Trn} 451$ ) ; one of the following courses: Transportation Organization and Management (Trn 452) ; Utility Regulation, Management, and Ownership (Trn 455) ; Economics of Regulated Industries (Ec 463).
Business Environment: The business environment curriculum is designed to enable the student to gain a perspective of the administrative decision-making process, and an understanding of the relationships between the business firm and the economic, legal, social, ethical, and political environments in which it functions.

The major requirements, in addition to the general business requirements of the school, total 24 credit hours, as follows ( 3 credit hours, each course) : Financial Systems (Fin 314) ; Legal Aspects of Business Regulation (BE 420) ; Business Enterprise and Social Responsibility (BE 425) ;

Business Fluctuations and Planning (Fin 436) ; Business Policies (Mgt 453 ) ; minimum of 9 credit hours from the electives listed below.

Electives ( 3 credit hours, each course) : Consumer Problems of the Poor (BE 339) ; Analysis of Consumer Behavior (Mkt 361) ; Democratic Processes (PS 456) ; Cases in Forest Industries Management (Mkt 470) ; Taxation Topics (Fin 323) ; Small Business Management (Mgt 340) ; Development of Management Thought (Mgt 480) ; Seminar : Business Internship (BE 407).

## Marketing

## Undergraduate Courses

Mkt 311. Marketing Systems and Demand Analysis. 3 credit hours. Dynamics of demand ; economic and behavioral approaches to analysis of demand ; purchase motivationsconsumer versus industrial ; flows of goods and services ; nature of marketing institutions.
Mkt 360. Marketing Management. 3 credit hours. Marketing planning and control : planning, organizing, measuring, evaluating, and controlling marketing performance.
Mkt 361. Analysis of Consumer Behavior. 3 credit hours. Consumer-firm relationship analyzed through the application of concepts drawn from contemporary behavioral science to concrete business cases and practices. Relevant concepts from fields of cultural anthropology, sociology, and psychology applied to problems encountered in marketing to various consumer groups. Prerequisite: Mkt 311 or consent of instructor
Mkt 365. Retail Administration. 3 credit hours. Structure of retailing ; efficiency in the retail sector; organizing the firm; management of price and nonprice competition; space allocation and stock control; management science and retailing; retailing and the future. Prerequisite : Mkt 311, or consent of instructor.
Mkt 401. Research. Credit hours to be arranged with sponsoring professor and department head.
Mkt 403. Thesis. Credit hours to be arranged with sponsoring professor and department head.
Mkt 405. Reading and Conference. Credit hours to be arranged with sponsoring professor and department head.
Mkt 407. Seminar. Credit hours to be arranged.
Current Problems in Marketing (may be repeated).
Mkt 409. Practicum. Credit hours to be arranged with sponsoring professor.
Mkt 430. Entrepreneurship. 3 credit hours. Analysis of variation in types of entrepreneurs, firms, and their effect on company growth rates. Focus on marketing-management problems of the entrepreneur in the growth-oriented firm. Research projects conducted with actual entrepreneurs and their firm. Development of a realistic marketing and business plan in a group project. Mkt 460. Marketing Research. 3 credit hours. Influence of marketing research on the decision-making process; effect on the executive who must use it ; uses and misuses. Emphasis on the cost versus the value of information for decision-making. Problem
formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and reporting. Research projects conducted on actual marketing problems. Prerequisite QM 333, Mkt 311, or consent of instructor.
Mkt 462. Marketing Communications. 3 credit hours. Problems of marketing to consumers considered as problems in communication ; advertising and sales promotion as formal channels of communication; economics of advertising and sales promotion; marketing communications as they relate to the public and to public policy. Mkt 311 and Mkt 361 recommended.
Mkt 463. Marketing Analysis. 3 credit hours. Analytical methods, tools and models for marketing decision-making, with emphasis on the major elements of the marketing mix. Prerequisite: Mkt 311, QM 333, or consent of instructor.

## Mkt 464. Marketing Problems. 3 credit

 hours. Solution of marketing problems. Practicum approach utilizing case studies, simulations and projects. Prerequisite : Mkt 360,361 , and 460 , or consent of instructor.Mkt 469. Industrial Marketing. 3 credit hours. The marketing problems of manufacturers of industrial goods, such as machinery and equipment, raw and semi-fabricated materials, industrial supplies, and component parts ; cases involving a wide variety of industries. Prerequisite : Mkt 311.
Mkt 470. Cases in Forest Industries Management. 3 credit hours. General manment problems in the forest products indus-tries-lumber, plywood, pulp and paper, construction, and housing ; marketing, production, finance, control, human relations; major emphasis on marketing problems. Cases, supplemented by field trips and a forest industries business game. Not offered 1978-79, 1979-80.

## Upper-Division Courses Carrying Graduate Credit

Mkt 468. Consumer Issues. (g) 3 credit hours. A competence course designed to prepare the student to deal rationally with the realities of the marketplace. This is a required course for all elementary-education majors seeking state certification ; special emphasis is given to the knowledge and abilities necessary to teach effectively consumer topics in the elementary school classroom. Credit is not given toward any requirements of the College of Business Administration.
Mkt 475. International Marketing Management. (G) 3 credit hours. Study of marketing methods in the international environment. Prerequisite: QM 232, Ac 323, Fin 316, Mgt 329 , Mkt 311, or consent of instructor.

## Transportation

## Undergraduate Courses

Trn 349. Transportation and Distribution Systems. 3 credit hours. Principles and practices of transportation and its role in the distribution process. The physical transportation plant of the United States and its performance ; carrier responsibilities, services, and cooperation; economic and legal bases of rates, freight classification and tariffs; relationships between transportation and the location of economic activity : public policies regarding regulation, unification, labormanagement relations, promotion, and similar transportation problems.

Trn 350. Business Logistics. 3 credit hours.
Problem of purchasing transportation services, selecting transportation alternatives, and planning the physical distribution system of the firm. Includes a consideration of rate structures, shipper's rights in law, relationship of physical distribution to the marketing function and the production function, inventory management and control, plant location and warehousing.
Trn 351. International Transportation and Distribution Management. 3 credit hours. Role of the United States and world ocean and air transportation in international trade and development. Physical facilities; basic laws, policies, and associations affecting carrier and shipper operations ; problems of international and intercarrier cooperation ; principal trade routes and commodity flows ; packaging, documentation, rates, and charters; marine and air cargo insurance; land-based supporting organizations, including terminal operations and connecting foreign land transportation systems. Emphasis on use of international transportation in export and import activities.
Trn 401. Research. Credit hours to be arranged.
Trn 403. Thesis. Credit hours to be arranged.
Trn 405. Reading and Conference. Credit hours to be arranged.
Trn 407. Seminar. Credit hours to be arranged.
Trn 409. Practicum. Credit hours to be arranged.

## Upper-Division Courses Carrying Graduate Credit

Trn 451. Transportation Administrative Law. (G) 3 credit hours. Historical background and present status of state and federal transport regulation, with particular attention to the Interstate Commerce Act and other pertinent federal and state statutes. The organization and procedure of transport regulatory agencies, and the rules of practice before such bodies. Prerequisite : Trn 349, or Trn 350, or Ec 463, or consent of instructor.
Trn 452. Transportation Organization and Management. (G) 3 credit hours. Carrier organization and management problems. Operational, personnel, financial, pricing, and related practices as influenced by competition and governmental policies. In addition to classroom work, students make detailed study of a type of carrier or carrier problem related to their specific career interests. Prerequisite : $\operatorname{Tr} 349$, or $\operatorname{Tr} 351$, or Ec 463 , or consent of instructor.
Trn 455. Utility Regulation, Management, and Ownership. (G) 3 credit hours. Review of historical and present regulatory laws, agencies, and procedures; problems and policies of municipal, state, and federal ownership; management of various kinds of privately owned utility firms (electric, gas, communications). Organizational structures, price policies, marketing of services, shortand long-range planning, public relations. Particular emphasis on problems affecting the Pacific Northwest.

## Business Environment

## Undergraduate Courses

BE 125. Environment of Business. 3 credit hours. Roles and responsibilities of business in society ; influences of the historical, social political, and economic environments within which business operates; adjustment to changes in these environments ; interrelation-
ships of major functional areas of business. Not open to upper-division majors in business.
BE 199. Special Studies. 1-3 credit hours.
BE 226. Introduction to Law. 3 credit hours. Forms and functions of the law in society. Examination of the American legal environment: structure of the courts; trial and appellate procedure ; origin of rules; methods of legal reasoning; roles of trial participants. Emphasis on the law of contracts, including appropriate references to the Uniform Commercial Code. Prerequisite: sophomore standing.
BE 326. Law of Business Organization. 3 credit hours. The law of agency; the master-servant relationship, including elementary labor law; the law of business organizations, including corporations, partnerships, and other forms of business associations; applications of the Uniform Commercial Code to investment securities. Prerequisite : BE 226.

## BE 339. Consumer Problems of the Poor

3 credit hours. Problems of low income households. Field research preparation for work away from campus spring term. Class discussions, lectures, group discussions, films, and field trips. A written study proposal is required.
BE 401. Research. Credit hours to be arranged.
BE 403. Thesis. Credit hours to be arranged.
BE 405. Reading and Conference. Credit hours to be arranged.
BE 407. Seminar. Credit hours to be arranged.
Foreign Commercial Law.
Business Internship.
BE 409. Practicum. Credit hours to be arranged.
BE 418. Law of Business Transactions. 3 credit hours. Study of the several fields of law related to business: negotiable instruments; sales of personal property ; security devices for credit transactions. Prerequisite : BE 226.
BE 425. Business Enterprise and Social Responsibility. 3 credit hours. Analysis of specific management policies as they relate to social objectives; patterns of governmental regulations; political activities of trade associations and other special-interest groups; relation to the growth of corporate enterprise to public policy and to the responsibilities of business management. Prerequisite: senior standing.

## Upper-Division Courses Carrying Graduate Credit

BE 420. Legal Aspects of Business Regulation. (G) 3 credit hours. Study of the broad aspects of governmental regulation of business and constitutional limitations upon such regulation. Particular treatment is given to the law of administrative agencies and to some specific areas of regulation, including business combinations and pricing policies. Prerequisite : BE 226.

## Graduate School of

## Management and Business

The Graduate School of Management offers degree programs at both the master's and doctoral levels, and coordinates the graduate work of the four administrative departments of the College of Business Administration. In all fields, instruction in the College is supported by courses in cognate fields offered by other divisions of the University.

The graduate program is accredited by the American Assembly of Collegiate Schools of Business.

## Master's Degree Programs

## Preliminary Core Program:

The first year of the master's program includes a series of core courses required for students whose undergraduate studies have been in fields other than business administration. All or part of this requirement may be waived for students who have had equivalent instruction. The preliminary core consists of Accounting Concepts (Ac 511) ; Accounting in Aclministration (Ac 512) ; Statistics for Business Decisions (QM 511) ; Financial Environment (Fin 514) ; Financial Management (Fin 516) ; Legal Environment of Business (BE 517) ; Management Analysis (Mgt 511) ; Administration of the Marketing Function (Mkt 511) ; Intermediate Economic Analysis (Ec 375, and Fin 332 ) ; Calculus for Nonphysical Science (Mth 207, 208) ; Introduction to Numerical Computation (CS 133 or CS 131).

## The M.B.A. Program:

The M.B.A. program aims to prepare students for high level management careers in business and other organizations. Management education is viewed as training in the general management area and is supplemented by opportunities for students to specialize in given functional fields. Specialization is carried out in four administrative departments offering work in the following major options:
(1) Accounting and Quantitative Methods (Accounting, Quantitative Methods).
(2) Finance (Finance, Real Estate and Urban Land Economics, Business Economics).
(3) Management (Human Resources Management, Operations Management, Organization and Management).
(4) Marketing, Transportation, and Business Environment (Marketing, Transportation and Logistics).

The M.B.A. program primarily focuses on profit-oriented organizations, although individual students may explore certain aspects of management education pertinent to either nonprofit organizations or government agencies. The program generally takes two years of study consisting of the preliminary core and the principal program. The former accounts for approximately 42 credit hours, and the latter consists of a minimum of 45 credit hours.

## The Principal Program:

In addition to completing the preliminary core program or its equivalent, all M.B.A. students must meet the following requirements: (1) completion of a minimum total of 45 hours of graduate credit beyond the preliminary core, of which a minimum of 36 hours must be in courses exclusively for graduate students ( 500 level) ; (2) of the 45 credit hours, at least 36 must be in the College of Business Administration (including not more than 18 in the area of concentration). The remaining hours may be in either business courses or in related areas outside the College of Business Administration.

Within these general guidelines, more specific requirements must also be met : (1) Business Core Area: All M.B.A. students are required to take: Management and Behavioral Science (BA 521), Applied Statistical Techniques (BA 522), Decision Making in Management (BA 524).
(2) Area of Concentration: 12 credit hours as specified by the student's major department.
(3) Area Block: 12 credit hours, including at least 3 hours in each of the clepartments other than the one where the major area of concentration is taken, and an additional 3 hours in one of them.
(4) Electives: 12 credit hours in either business courses or in related areas outside the College of Business Administration.

At least 9 credit hours of the total work offered in the 45 must be in courses with a high degree of application, as opposed to theoretical content ; such courses are designated by the various departments.

The program of study must be approved by the student's adviser in the area of concentration.
Other Master's Programs:
Master of Science in Accounting: The M.S. program in accounting is designed
for those students with little or no prior training in accounting (two-year prograns), and for those students with prior work in the field who want a greater degree of specialization than is available through the M.B.A. program.

The requirements are : (1) completion of the preliminary core program or equivalent, and (2) completion of a minimum total of 45 hours of graduate credit beyond the preliminary core program, including 12 to 24 hours in accounting ; 9 hours from the Business Core Area; 12 to 24 hours in supporting areas. For specific course requirements, consult the department. Programs of study are individually designed by the student and a faculty member within certain limits set by the department.
Master of Science or Master of Arts: The program leading to the M.S. or M.A. clegree (in disciplines other than accounting) allows more specialization than the M.B.A. program, and may be adapted to the particular needs of the student.

The requirements are: (1) completion of the preliminary core program or equivalent, (2) completion of a minimum total of 45 hours of graduate credit beyond the preliminary core program, (3) within the 45 credit hours, a major in a field of specialization consisting of a maximum of 15 hours of course work and 9 hours of thesis, (4) within the 45 hours, a minor consisting of a minimum of 12 hours of course work in the College of Business Administration or in a cognate field, and (5) of the 45 hours, the remaining 9 hours in business courses outside the field of specialization or in related areas outside the college. However, no more than 18 of the 45 required credit hours may be taken outside the College of Business Administration. For the M.A. degree, competence in a foreign language is required.
Minor in Business Administration: A master's degree candidate with a major in another field or in an interdisciplinary studies program may elect a minor in business administration. The minor is usually chosen from graduate-level business courses in the preliminary core. Minor programs must be reviewed by the school before course work is taken, and students taking a minor in business should, in general, meet standards required for admission to the College.

## Interdepartmental Programs

Two special interdisciplinary programs are offered across departmental lines. These are Forest Industries Manage-

## ment and Industrial and Labor Relations.

Forest Industries Management: This special M.B.A. program in Forest Industries is designed primarily for students with a baccalaureate degree in forestry. However, students with degrees in other fields but with undergraduate study and industrial experience in the forest industries are sometimes accepted. The program consists of 45 credit hours in addition to the preliminary core, 36 of which must be in the College of Business Administration. Of the 45 hours, 9 are devoted to the M.B.A. core, consisting of BA 521, Management and Behavioral Science ; BA 522, Applied Statistical Techniques; BA 524, Decision Making in Management.
Twelve hours are in the area of concentration : Mgt 520, Operations Research Applications; Mgt 522, Concepts of Linear Programming; Mkt 569, Problems in Industrial Marketing; Mkt 570, Problems in Forest Industries Management.

In the area block, at least one course must be chosen from each of the four departments. Suggested courses are: Ac 523, Managerial and Financial Accounting Analysis; QM 434 G, Applied Regression Analysis; Fin 541, Real Estate Economics; Fin 573, Problems in Finance ; Mkt 560, Marketing Research; Mkt 565, Marketing Problems and Policies; Mgt 515, Computers in Business ; Mgt 530, Operations Simulation.

Elective courses may be either in business or related areas outside the College.
The 24 credit hours comprising the area block and elective hours will vary with the student's undergraduate preparation in the general field of forestry, and they are selected with the guidance and approval of an interdepartmental committee.

In the above listed courses and in other courses where major term papers are required. Forest Industries majors are expected to relate the contents of their papers to problems and issues of the forest industries. Copies of these papers are to be furnished to the Director of the Forest Industries Management Center at the time of submission to the particular course instructors.
Industrial Relations: An integrated program with a choice of courses in economics, management, political science, sociology, and other disciplines. The program leads to the M.S. or M.A. degree, and requires 45 credit hours of work with thesis in courses approved
by the Institute, or 54 hours of work without thesis. The program must cover at least three disciplines and must provide for at least 18 hours of work in one of the disciplines. At least 15 hours of the 45 or 54 must be in courses numbered 500 or higher.

The prerequisites for the program are a baccalaureate degree and 27 credit hours of prior work in the disciplines represented in the graduate program.

The program prepares students for careers in government, management, or with trade unions. Fields of concentration may include unions, management, and labor relations policy ; manpower utilization and development ; organizational studies and human resource management.

## Administration of the Master's Programs

Admission: Consistent with the goal of the College of Business Administration to train individuals with the greatest potential for becoming successful managers, the selection process for admission is aimed at admitting those students who have demonstrated their ability and potential to become responsible and effective managers.

The College is interested in the applicant's general intellectual ability, initiative and resourcefulness, creativity, seriousness of purpose, maturity, and capacity for growth. In addition, oral and written communication skills are important. Students should have a demonstrated capacity for general verbal and quantitative thinking and be able to take an orderly, analytical approach to problem-solving and to the generation of alternative solutions. The ability to take ideas from different sources and see important relationships is very desirable. Students also should be self-starters with considerable persistence and drive and should have some understanding of the broad social, political, and economic implications of decisions and actions.

More specifically, the admission process is based on four categories of information:
(1) Scholastic performance and grade point average.
(2) Graduate Management Admission Test (GMAT).
(3) Recommendations from at least three faculty members or others who can comment on the student's potential to do graduate work in business.

## (4) Letter of Purpose.

With this information, students are judged on their academic abilities and potential ; their potential for leadership
and management ; and their commitment, readiness, and motivation to complete the program.

Applicants meeting the admission criteria are admitted to the University of Oregon as regular graduate students. Under certain circumstances, applicants may be admitted on a provisional basis. This normally happens when the applicant's file shows considerable promise but lacks some important piece of information. For example, an applicant may have taken the GMAT, but the College has not received the official scores at the time of the deadline for admission. Under such circumstances, the applicant receives a provisional admission with continuation as a graduate student contingent on receipt of an acceptable GMAT score.
Deadline for Admission: Applications and all supporting documents should be received by the Graduate School of Management 45 days before the start of the term for which application is being made.
Program Planning: After the student has been admitted to the master's program, the department in which the student wants to major will assign a faculty member as an adviser. Under the rules laid down by the College, all students must file, by the end of the first term in residence, a program approved by the adviser and meeting the requirements stipulated above. Should the student want to change the program at a later date, an amended program signed by the adviser may be filed.
Should a student complete all or part of the preliminary core before being admitted to the M.B.A. program, a petition for a waiver of the preliminary core courses already completed may be submitted.
Change of Major: Students wanting to change majors must file a Change of Major form with the College. It is then up to the student to find an adviser appropriate to the new major in order to develop a program. Where the Change of Major involves an interdepartmental transfer, the following rules apply.
In the case of graduate students who have cumulative grade point averages of 3.0 or better and whose records show that their grade point averages at the University of Oregon have never fallen below 3.0 and that they initially met the admission standards for the Graduate School of Management, interdepartmental transfers will be effected by the Associate Dean of the Graduate School of Management.

In the case of students who do not meet the 3.0 grade point average, or who are in an unsatisfactory standing either with the College or the University or both, transfers may be effected only after the departments to which the students want to transfer have indicated that they will accept them.
General University Regulations: Please refer to the Graduate School section of this catalog (pages 25-32) for general University regulations and information regarding registration, academic performance, and other matters relating to graduate students.

## Doctoral Program

The Graduate School of Management and Business offers a program of advanced graduate study and research leading to the degree of Doctor of Philosophy in Business Administration for students preparing for careers in college teaching and administration and for responsible research positions in business and government. The program is administered by the Director of the Doctoral Program, Prof. Richard M. Steers, assisted by a Ph.D. Committee of four business faculty members and one doctoral student member.
Program of Study: The Ph.D. normally requires three years of intensive study beyond the master's degree. Since the program focuses on developing competent scholars, heavy emphasis is placed on the development of both teaching and research skills. All doctoral students are encouraged sometime during their program to assume primary teaching responsibility for an undergraduate business course. In addition, all doctoral students are required to demonstrate a high level of competencies in scholarly research.

## Major Areas of Concentration

Accounting. Focuses on managerial and financial accounting, auditing, cost analysis, and control for public, industrial, and governmental accounting.
Finance. Concentrates on financial management, financial institutions, corporate finance, investment, and security analysis. Related courses are also available in economics.

## Human Resources Management.

Emphasizes personnel management and labor relations in public and private organizations, behavioral science and labor economics, compensation, collective bargaining, and conflict and change.

Management Science. This interdepartmental option covers quantitative and computer models and their applications to the functional areas of business. Emphasis is placed on applications in industrial management, production and operations management, and other areas of business.

Marketing. Covers a wide range of issues, including marketing theory, consumer and industrial marketing, marketing research and sales forecasting, management of product, pricing, promotion, and distribution.
Organization and Management. Focuses on the behavioral and administrative aspects of organizations, including organizational behavior, organization design and effectiveness, organization-environment relationships, and administrative processes. Related courses are also available in psychology and sociology.
Quantitative Methods. Emphasizes quantitative decision procedures, regression analysis, the analysis of variance, time-dependent processes, sampling techniques, multivariate analysis, nonparametric statistics, dynamic programming, and industrial dynamics.
Transportation and Logistics. Examines carrier and logistics management, international and public policy aspects of transport and distribution systems.

## Admission

For admission to the doctoral program, the student must (1) satisfy the the admission requirements of the Graduate School of Management and of the Graduate School of the University. (2) have completed the graduate work required for a master's degree. In exceptional circumstances a student may be admitted immediately after completion of a baccalaureate degree, (3) be recommended by the department having primary responsibility for the area in which the candidate expects to major, and by the Ph .D. committee, (4) provide evidence of scholarly promise. Inquiries concerning the program should be addressed to the Director of Doctoral Studies.

## Degree Requirements

The student's program must satisfy the requirements of the Graduate School of the University, and the following requirements of the College of Business Administration:
(1) Three years of work beyond the baccalaureate degree, with two years of residence on the Eugene campus.
(2) Satisfaction of the University of Oregon's M.B.A. preliminary core program. Individual course requirements may be satisfied by previous course work upon approval from the College Ph.D. Committee. Courses not completed before admission to the program should be taken in the student's first year in the program.
(3) Demonstrate competence in a Major Area of Concentration in the College of Business Administration. The student is expected to master the literature and techniques in this area, to be prepared to write an acceptable dissertation, and to do research of high quality. Competence is demonstrated by passing a written comprehensive examination in the area, given by the departnẹent. The minimum requirements for the major area are to be specified by the department having primary responsibility for the area. Programs involving interdisciplinary research and faculty guidance may be accommodated within the major areas.
(4) Demonstrated competence in a Supportive Area. The supportive area is either a logical extension of the major area or may serve as a second teaching field or both. If a second teaching field is elected as the supportive area, the level of competence required is that necessary to comprehend literature and techniques of the field and to be prepared to teach elementary courses in that field. The required work constituting this area typically will be fulfilled by completion of four or more graduate level courses; the proposed work is subject to final approval by the student's Advisory Committee. Each course used to meet this area requirement must be passed with a grade of B or higher, and at least two courses must be completed at the University of Oregon after admission to the Doctoral Program. The supportive areas include the areas listed as major areas of concentration plus Business Economics, Business Environment, Operations and Systems, and Urban Land Economics. Alternative supportive areas inside or outside the College of Business Administration may be developed by the student and the Advisory Committee.
(5) Demonstrate competence in Quantitative and Research Methods. The student is expected to complete four or more graduate level courses in quantitative and research methods which are defined by the student and his or her committe and to pass a written comprehensive examination. The course requirements typically are fulfilled with quantitative methods
courses from within the College. However, alternative courses inside or outside the College (or courses taken at other institutions) are permissible upon the approval of the student's Advisory Committee. If the student elects Quantitative Methods as the major area, an additional supporting area (described earlier) must be selected. The examination is to be given by a comminttee consisting of the student's Advisory Comminttee chairman and at least two faculty members from the area of Quantitative Methods who are selected by the Ph.D. Committee. The examination is structured so that at least 75 per cent of the content is over the area of quantitative methods. When in the judgment of the student's examination committee, the program of study has been such as to warrant it, a faculty member from a department outside the College of Business Administration may be included as a fourth member.
(6) Demonstrated competence in a Behavioral Science or Economics Tool Area. The student is expected to complete at least four graduate level courses in economics or in courses relating to an understanding of human behavior. The course work constituting this area of study is subject to final approval by the student's Advisory Committee. Each course used to meet this area requirement must be passed with a grade of $B$ or higher and at least two courses must be completed at Oregon after admission to the Doctoral Program.
(7) Complete 3 credit hours in Ph.D. Research Seminar (BA 590). This course will not fulfill requirements ini any of the four areas described above.
(8) To be eligible to take comprehensive examinations, the student is required by Graduate School policy to have completed substantially all the course work for the degree and substantially all other requirements except the completion of the thesis and a final oral examination defending it.

The student must attempt both written examinations within thirteen months of each other. In the event of a failure, a student may retake a comprehensive exarinination once, at the individual's option, and after consultation with the Advisory committee. All examinations must be completed within nineteen months of the date of the first examination. Comprehensive examinationis are offered during fail and spring terms. Upon approval of a petition to the Ph.D. Committee, examinations during winter
term and summer session may be arranged by agreement between the student and the examining committee.
(9) Advancement to Candidacy. The student is advanced to candidacy for the Ph.D. degree upon satisfying requirements (1) through (8) above, and upon recommendation by his or her Advisory Committee to the College of Business Administration and the Graduate School of the University. Advancement must occur no later than four years after the student's entry into the program.
(10) Dissertation. The student must complete a dissertation embodying the results of research and showing evidence of originality and ability in independent investigation. The dissertation must show mastery of the literature and techniques, be written in creditable literary form, and represent a contribution to knowledge.

The student is responsible for formation of a dissertation committee, subject to approval by the College of Business Administration and the Graduate School of the University. This committee must include at least three regular facuilty members of the College of Business Administration and at least one member from outside the College of Business Administration. The chairman of the committee serves as the student's primary dissertation adviser. Before the dissertation topic may be accepted by the dissertation committee, the student must make public oral presentation of the research proposal and design. When the proposed dissertation topic is accepted by the committee, a copy of the proposal, signed as approved by the committee, is placed in the candidate's record. The dissertation must be completed within three years of the student's advancement to candidacy. Upon petition, this period may be extended for one year. Failure to complete the dissertation within this time period will invalidate the student's comprehensive examinations and advancement to candidacy.
The dissertation is approved upon evaluation and certification by the dissertation committee. Before approval, the student must successfully defend the completed dissertation in a public oral examination and defense before the dissertation committee. (11) Grade Point Average. The student must maintain a cumulative GPA of 3.00 or higher in graduate courses.
(12) Termination in Program. A student's participation in the Ph.D. program may be terminated by the Ph.D. Committee if the student fails to
satisfy any of the program requirements, and upon the recommendation of a nilajority of the student's Advisory or Dissertation Committee. The committee must vote on termination under the following conditions:
(a) Failure to make satisfactory progress toward advancement to candidacy.
(b) A cumnlative GPA below 3.00 .
(c) GPA less than 3.00 received in two consecutive terms.
(d) Failure to complete a dissertation within three years after the student is advanced to candidacy.
(e) Any time a member of the Advisory or Dissertation Committee requests a vote.
(f) At the request of the student.

The committee vote must be transmitted in writing to the Ph.D. Committee for review and will be placed in the student's file. If a student is dropped from the program, he or she will be notified in writing, with the reasons for the termination clearly explained.

## Business Administration

BA 507. Seminar. Credit hours to be arranged.
BA 521. Management and Behavioral Science. 3 credit hours. Study of the applications of behavioral science concepts in managerial decisions involving individuals, dyads, and groups. Development of understanding and skill in the application of basic sociological/psychological research findings with special focus on cognitive processes, personality, culture, motivation, and communication. Course provides content and experimental learning applied to the problems of: (a) leadership and motivation; (b) interpersonal, group, and organizational communication; (c) socio-techno planning and control; and (d) consumer behavior, Prerequisite : Mgt 511 or equivalent.
BA 522. Applied Statistical Techniques. 3 credit hours. Emphasizes the use and complementary nature of classical inference, nonparametric methods, and methods of decision analysis in managerial decision-making. An overview of multiple regression analysis, time series analysis, forecasting and survey sampling is also provided. Emphasis is placed upon the managerial, as opposed to the methodological and the research, uses of statistical methods. Prerequisite: QM 511 or equivalent.
BA 523. Business and Society. 3 credit
hours. This course examines a variety of issues and perspectives regarding the relationship of busines firms to the larger society and appraises issues anid differing perspectives.

## BA 524. Decision Making in Management.

 3 credit hours. Designed to integrate the major business disciplines into a functioning concept of business operations. The course utilizes a business game and case studies to provide experience in the making of management decisions of both a strategic and a tactical nature. Prerequisite: Open to M.B.A. students only. Ideally, the course should be taken in the last term of graduate work. In any event, the course is not to be taken priorto beginning the last 24 hours of graduate work.

## BA 590. Ph.D. Seminar in Research

 Methods. 3 credit hours. Presents research methods and topics for business majors in disciplines other than their own. Enrollment restricted to candidates for the Ph.D. degree in Business Administration.
## Accounting

Upper-division courses carrying graduate credit appear on page 199.
Ac 501. Research. Credit hours to be arranged. No-grade course.
Ac 503. Thesis. Credit hours to be arranged. No-grade course.
Ac 507. Seminar. Credit hours to be arranged. Doctoral Seminar.
Economic Regulation and Accounting Policy. Social Cost Measurement.
Tax Planning.
Ac 508. Workshop. Credit hours to be arranged.
Ac 509. Practicum. 1-2 credit hours.
Ac 511. Accounting Concepts. (P) 3 credit hours. Accelerated introduction to principles and procedures of financial accounting and the use of accounting data for business decisions; survey of the data-creating process followed by study of asset and liability valuation and income measurement.
Ac 512. Accounting in Administration. (P)
3 credit hours. Accelerated introduction to principles and procedures of managerial accounting; study of cost analysis, budgeting and control. Prerequisite: Ac 511, QM 511.
Ac 523. Managerial and Financial Accounting Analysis. 3 credit hours. An extension of ideas presented in Ac 511 and Ac 512. Designed for the nonaccounting major who wishes to expand knowledge of financial reports. Prerequisite: Ac 511 and Ac 512 ; open to nonmajors only.

## Ac 540. Administrative Controls. 3 credit

 hours. Descriptive cybernetics and the concept of control as a property of all organized behavior; control attitudes and practices in human organizations; traditional and emerging views of the role of control in administration; problems of performance measurement ; military command and control systems ; rudiments of information and communication theory; computer abuses; role of man in a controlled system; student papers usually theoretical and related to major fields.Ac 542. Auditing Concepts. 3 credit hours. Analysis and criticism of traditional auditing philosophy and theory. Examination of contemporary auditing research. Course content yaries somewhat year to year with changing interests of participants. Prerequisite: Ac 440.

## Ac 551. Development of Accounting

Thought. 3 credit hours. Examination of the development of accounting, including consideration of historical, methodological, measurement, and structural aspects. Examination of contemporary trends in research. Prerequisite: Ac 352, consent of instructor. Ac 552. Accounting Theory. 3 credit hours. Readings in accounting literature, study of some current controversial areas in accounting and information theory, including the conceptual framework underlying accounting reports to external users. Content varies somewhat from year to year with changing interests of participants. Prerequisite: Ac 352, consent of instructor.

Ac 562. Cost Analysis and Interpretation. 3 credit hours. Readings in managerial accounting and related literature. Course content will vary somewhat with changing
interests of participants. Topics examined may include a wide range of planning and control issues in bothp rofit and nonprofit institutions.

## Quantitative Methods

Upper-division courses carrying graduate credit appear on page 199.
QM 501. Research. Credit hours to be arranged. No-grade course.
QM 503. Thesis. Credit hours to be arranged. No-grade course.
QM 507. Seminar. Credit hours to be arranged.
Dynamic Time-Dependent Processes. Dynamic Systems.
Multivariate Methods.
QM 511. Statistics for Business Decisions. 3 credit hours. Accelerated study of business statistics ; probability, estimation, hypothesis testing, simple and multiple regression analysis. Open only to graduate students. Prerequisite : one year of college mathematics.
QM 523. Dynamic Programming. 3 credit hours. Systematic procedure for determining the combination of decisions which maximizes overall effectiveness. Optimization of inventory scheduling, distribution of effort problems, decision-making over an unbounded horizon, stochastic and probabilistic models are considered. Application of the models to real business problems is stressed. Prerequisite: QM 333 and CS 131; Mgt 522 recommended. Not offered 1978-79.
QM 530. Applied Nonparametric Statistics. 3 credit hours. Procedures for statistical analysis when the data do not conform to parametric assumptions. Tests using nominal data, or using ordinal data tests for one sample, tests involving two or more samples (related or unrelated), goodness-of-fit tests. Open only to graduate students. Prerequisite : QM 511 or equivalent.

## QM 532. Analysis for Decisions under

 Uncertainty. 3 credit hours. The mathematical analysis of decisions under conditions of uncertainty. The subjective basis for probability, the sequential nature of Bayesian inference, likelihood principles, prior and posterior distributions of parameters in binomial poisson and normal populations. Decision theory, utility theory, and the economics of sampling. Prerequisite : Mth 208, QM 333, or equivalent.QM 534. Applied Multivariate Analysis. 3 credit hours. The fundamental concepts and statistical reasoning which underlie the techniques of multivariate analysis. Topics include: multivariate regression analysis, discriminant analysis, principal components, factor analysis, canonical correlation, and cluster analysis. Analysis of computer program output for each model emphasized. Prerequisite : QM 434, Mth 208.
QM 536. Applied Sampling Techniques. 3 credit hours. Theory and application of probability sampling techniques to business problems. Topics: simple random sampling, stratified sampling, cluster sampling, systematic sampling, multistage sampling, double sampling, nonresponse problems, ratio and regression estimators. Prerequisite: QM 333 or equivalent ; open to seniors only with consent of instructor.

## Finance

Upper-division courses carrying graduate credit appear on page 201.
Fin 501. Research. Credit hours to be arranged. No-grade course.
Fin 503. Thesis. Credit hours to be arranged. No-grade course.
Fin 507. Seminar. Credit hours to be arranged. Other topics to be announced as interest warrants:
Advanced Finance Theory.
Industrial Organization and Public Policy.
Fin 508. Workshop. Credit hours to be arranged.
Fin 514. Financial Environment. 3 credit hours. The financial system as an external environment affecting businesses and financial decisions. Characteristics of the overall functions of money and credit, and their influence on product demand and the supply of finance from the point of view of the individual business ; roles of monetary and fiscal policy, the Federal Reserve System, and the money and capital markets. Prerequisite: Ec 375 or equivalent.
Fin 516. Financial Management. 3 credit hours. Objectives, tools, methods, and problems of financial management from the viewpoint of the firm ; special problems, including funds acquisition, dividend policy, capital acquisitions, taxes, mergers, forecasting, and investment banking. Prerequisite : at least one accounting course; Fin 332.
Fin 528. Business Taxation. 3 credit hours. The principles, structure, and economic effects of business taxation in the framework of the total tax structure ; implications of taxation for management decision-making. The emphasis is not on the complexities of tax law, tax accounting, or tax regulations, but on the broader impact of taxation on business. Prerequisite: Ec 375, Fin 332, or equivalent.
Fin 530. Business Conditions Analyzing. and Forecasting. 3 credit hours. Emphasis is on trends of basic data and the determinants of private business and government decisions affecting the level of employment and economic growth. Theoretical models and forecasting techniques are described and related to particular regional and industrial planning needs. Prerequisite: Ec 375, or equivalent.
Fin 532. Managerial Economics. 3 credit hours. The varied forms in which economic concepts appear in the operation of individual business units; emphasis on the approach to problems of management decision-making and advance planning through formulation of problems in a conceptually quantitative manner capable of numerical solution. Integration of economic principles with various areas of business administration. Prerequisite: Mth 208 or equivalent, and $F$ in 332 or equivalent.
Fin 534. Methods of Business Research. 3 credit hours. Research techniques in business; project design ; analysis of data and data sources.
Fin 541. Real Estate Economics. 3 credit hours. Economics of development, use and re-use of real property in United States institutional framework; processes and considerations that result in or influence decisions by individuals or groups concerning real estate financing and investment.
Fin 555. Analysis of Business Risk. 3 credit hours. The risk-management concept; corporate organization for insurance and risk management ; analysis of exposure to loss;
self-insurance versus commercial insurance ; control of commercial insurance costs ; use of captive insurers. Prerequisite : Fin 455. Not offered 1978-79.
Fin 561. Monetary Policy. 3 credit hours. Examination of the Federal Reserve and the execution, identification, impact, and evaluation of monetary policy. Role of monetary policy in economic stabilization, importance for business behavior, and the implications for management decisions. Development of alternative models of the transmission and incidence of monetary policy. Prerequisite :
Fin 514, or equivalent.
Fin 563. International Finance and Investment. 3 credit hours. The international monetary system; balance of payments; liquidity, foreign exchange market ; foreign investment; international and regional financial institutions. Prerequisite : Fin 514, Fin 332.
Fin 565. The Money and Bond Markets. 3 credit hours. Analysis of the money and bond markets. The characteristics of major short- and long-term debt instruments; determination of the level of interest rates; analysis of differences in rates on different securities; the mathematics of bond prices; debt portfolio strategy. Prerequisite : Fin 514 , or equivalent.
Fin 567. Management of Financial Institutions. 3 credit hours. Analysis of management policies, of financial institutions, including liquidity management, liability management, asset management, and capital management; description of the legal, economic, and regulatory environment, and implications for management; examination of changing trends in financial markets. Prerequisite: Fin 514, or equivalent.
Fin 571 . Theory of Finance. 3 credit hours. Development of financial principles relating to problems of valuation ; capital acquisitions ; dividend policies; choice among financing alternatives. Prerequisite: Fin 516, or equivalent.

## Fin 573. Problems in Finance. 3 credit

 hours. Analysis of cases dealing with valuation; choice of capital acquisitions under uncertainty; working capital management ; the influence of capital structure, dividend policy, and growth on the cost of capital. Prerequisite : Fin 516, or equivalent.Fin 583. Concepts of Investments. 3 credit hours. Securities markets ; risk-return characteristics of investment media; concepts of security analysis and valuation ; investment and portfolio strategies of individual and institutional investors. Prerequisite: Fin 516, or equivalent. Not open to students who have taken Fin 380 or equivalent.
Fin 585. Equities Securities Markets. 3 credit hours. The organization and functioning of securities markets, particularly the markets for bonds and common stocks; analysis of the characteristics of efficiently functioning markets; consideration of the role of price behavior in determining whether a market is efficient. Topics for analysis include : (1) the determinants of the market structure, and (2) the impact of competition and regulation on market structure and organization. Prerequisite: Fin 380 or Fin 583, or equivalent.
Fin 588. Investment Administration. 3 credit hours. Development of capital market theory; risk-return parameters for security selection; portfolio selection and performance analysis. Prerequisite : Fin 380 or Fin 583, or equivalent.

## Management

Upper-division courses carrying graduate credit appear on page 203.
Mgt 501. Research. Credit hours to be arranged.
Mgt 503. Thesis. Credit hours to be arranged. No-grade course.

## Mgt 505. Reading and Conference. Credit

 hours to be arranged.Mgt 507. Seminar. Credit hours to be arranged.
Human Resource Management Operations Management
Organizational Behavior
Mgt 509. Practicum. Credit hours to be arranged.
Mgt 511. Management Analysis. 3 credit hours. Examines decision-making in organizational settings as it relates to the managerial role. Organizations are viewed as decisionmaking environments and the major contextual and structural influences on decisionmaking are identified. Models compared and contrasted. The major assumptions underlying each approach are examined, and techniques of decision-making are presented.
Mgt 515. Computers in Business. 3 credit hours. A basic concepts and systems-analysis orientation relating to data processing, information analysis, decision assistance and interactive time-sharing. Behavioral and technical considerations are incorporated to document the impact of computer activity on the organization.
Mgt 520. Operations Research Applications. 3 credit hours. Operations Research is a series of methods based on model building for decision-making. The methods range from crude qualitative models to high refined mathematical models. A conceptual orientation to the field, examination of the more commonly used mathematical models.
Mgt 522. Concepts of Linear Programming. 3 credit hours. This course deals with the theory and application of linear programming for the solution of a general category of problems which are concerned with the use or allocation of scarce resources. The student will study the underlying theory and formulate solutions to practical problems. Use will be made of the IBM 360/50 and the Mathematical Programming System (MPS).
Mgt 528. The Executive Function. 3 credit hours. Analysis of the structure and function of boards of directors ; the role of the chief executive ; impact of change such as the new Office of the President, minority representation, director liability, and the decline of the family firm. Special emphasis on the force of merger and conglomeration.
Mgt 530. Operations Simulations. 3 credit hours. Analysis and formulation of computer simulation models for operations management processes. Presents introduction to concepts of simulation methodology as they apply to analysis and design of operating systems. Application of simulation will be used in individual and group projects as experiments on a model system. Prerequisite : CS 131, QM 511.
Mgt 531. Quality of Working Life. 3 credit hours. The socio-technical approach to job and work system redesign. Topics to be covered include the evolution of job design, concepts of socio-technical systems, technological analysis, studies of job redesign, change processes, and action research ; review of demonstration projects and case studies of experimentation. Prerequisite : BA 521 or equivalent.

Mgt 532. Problems in Business Policies. 3 credit hours. Focus is primarily on the analysis and understanding of business cases which emphasize the overall functioning of the firm and the integration of business operations.
Mgt 533. Work Group Behavior. 3 credit hours. Major theories of group formation and behavior considered in terms of their implications for management; review of the literature concerning leadership processes and supervisory behavior, group cohesiveness, conformity, group norms and roles, decisionmaking and communication, and morale. Prerequisite: BA 521 or equivalent.
Mgt 534. Human Resources Management. 3 credit hours. Analysis of contemporary issues in human resources management : human resource planning; psychological testing and federal guidelines; assessment centers; training and career development; performance evaluations ; performance-based rewards; job satisfaction; union-management relations; affirmative action. Prerequisites: BA 522, or consent of instructor.
Mgt 535. Organizational Psychology. 3 credit hours. Analysis of psychological literature on human resources in organizations ; the nature of individual differences, job-person fit, psychological testing and research, selection and placement, training and development, performance evaluation and reward systems, measurement of job attitudes, and human factors engineering. Prerequisite: BA 521 and BA 522 or equivalent.
Mgt 536. Organizational Change and Development. 3 credit hours. Review of techniques for planned change in organizations, emphasizing theory, research, and applications ; conflict and conflict resolution; role of management in developing organizations. BA 521 recommended.

## Mgt 537. Motivation and Work Behavior.

 3 credit hours. Review of the empirical literature on motivation in organizations. Topics to be covered include basic motivational processes, contemporary theories of work motivation, job performance and satisfaction, attachment to organizations, reward systems, goal-setting processes, and job design. Emphasis on integrating research findings with management applications. Prerequisite: BA 521, BA 522 or equivalents, and consent of instructor.
## Mgt 538. Management of Technological

 Organizations. 3 credit hours. Analysis of the modern technological environment of organizations. Managerial problems associated with technologically oriented companies and research and development groups.Mgt 539. Collective Bargaining. 3 credit hours. Analysis of management-union bargaining relationships in the context of organizational employment objectives; constraints imposed by characteristics of industrial relations systems; contribution of bargaining theory and industry studies to explanation of bargaining processes ; cases in mock negotiations are utilized.
Mgt 540. Public Policy and the Employment Relationship. 3 credit hours. Examines the role of governmental policy and regulatory actions in the employment activities of organizations. Topics include affirmative action, OSHA, age and sex discrimination, benefits regulation, and collective bargaining. Emphasis on the experience of employing organizations in adjusting to policy standards and requirements.
Mgt 541. Theory of Business Organization I. 3 credit hours. Strategies for studying organizations. Organization structure and
design ; the impact of the environment and technology, and related management problems. Case examples. Prerequisite : Mgt 511 or equivalent.
Mgt 542. Theory of Business Organization II. 3 credit hours. A continuation of Mgt 541 with a particular emphasis on the interactions of organizational variables. The dynamics of organizational design. Prerequisite : Mgt 541 or consent of instructor.
Mgt 550. Research Methods in Organizations I. 3 credit hours. Review of general procedures for the conduct of behavioral research in organizational settings. Topics include sampling, measurement, instrument design, validation and reliability, basic research designs, data analytic techniques, and ethical considerations. Emphasis throughout on developing the manager or analyst as an intelligent consumer of behavioral data. Prerequisite: $B A 521$ and $B A 522$ or equivalents.
Mgt 551. Research Methods in Organizations II. 3 credit hours. Advanced studies in research design and implementation in organizations. Emphasis on actual experience in carrying out applied research projects relating to managerial and behavioral problems in organizations. Prerequisite: Mgt 550 .

## Marketing, Transportation, and Business Environment

Upper-division courses carrying graduate credit appear on page 205.

## Marketing

Mkt 501. Research. Credit hours to be arranged. No-grade course.
Mkt 503. Thesis. Credit hours to be arranged. No-grade course.
Mkt 507. Seminar. Credit hours to be arranged.
Management Science in Marketing.
Research in Consumer Behavior.
Experimental Marketing Research.
Product Innovation.
Marketing Information.
Marketing and Economic Development.
Marketing and Corporate Responsibility.
Marketing Management.
Mkt 511. Administration of the Marketing Function. 3 credit hours. Environment of marketing decisions; design of a marketing program; nature and behavior of markets; marketing planning ; product, channel, pricing, and promotion decisions; marketing and the law; evaluating marketing efficiency.
Mkt 530. Advanced Entrepreneurship. 3 credit hours. Analysis of variation in types of entrepreneurs, firms, and their effect on company growth rates. Focus on marketingmanagement problems of the entrepreneur in the growth-oriented firm. Research projects conducted with actual entrepreneurs and their firms. Development of a realistic marketing and business plan in a group project.

## Mkt 560. Marketing Research. 3 credit

hours. Marketing research as a tool for decision-making. Planning research projects; design, measurement, experimental and nonexperimental techniques, analysis and interpretation of data; reporting of research results. Prerequisite: Mkt 511, QM 511, or equivalent.
Mkt 561. Advanced Analysis of Consumer Behavior. 3 credit hours. Behavioral-science concepts utilized in the analysis of life-style patterns of the ultimate consumer ; values and behavioral patterns of consumer segments, and
their significance for marketing. Prerequisite : Mkt 511 or equivalent.
Mkt 562. Marketing Communications. 3 credit hours. Analysis of the environmental conditions that enhance or inhibit the firm's attempt to design and use the most effective communication for demand cultivation. Prerequisite : Mkt 511 or equivalent.
Mkt 563. Marketing Concepts and Theory. 3 credit hours. Application of theoretical concepts in the social sciences to the development of a theory of marketing. Prerequisite: consent of instructor.
Mkt 565. Marketing Problems and Policies. 3 credit hours. Marketing and formal planning; uncertainty and decision-making; marketing position analysis; problems in the management of the marketing mix ; design of marketing campaigns, facilities, organization, and systems ; evaluation of marketing performance. Prerequisite : Mkt 511, Fin 532 or equivalents.
Mkt 566. Demand Analysis. 3 credit hours. The development of individual company pricing policies ; the environment of pricing; effect of legislation and specific court rulings on pricing policy; contributions to pricing from economic theory, management science, and the behavioral sciences. Prerequisite: Mkt 511, Fin 532 or equivalents.
Mkt 569. Problems in Industrial Marketing. 3 credit hours. Determination of marketing strategy and tactics in selling to industrial, as opposed to household, consumer markets. Major issues of product policy pricing, marketing programs, and marketing organization. Problems of industrial purchasing during periods of materials scarcity. Development of sources of supply and relations with suppliers. Prerequisite : Mkt 511 or equivalent.

## Mkt 570. Problems in Forest Industries

 Management. 3 credit hours. Historical, economic, social, environmental, and technological factors affecting the current and future operations of the forest products industry. Cases, field trips, and a forest-industries business game. Prerequisite : Mkt 511 or equivalent.
## Transportation

Trn 501. Research. Credit hours to be arranged. No-grade course.
Trn 503. Thesis. Credit hours to be arranged. No-grade course.
Trn 507. Seminar. Credit hours to be arranged.
Trn 549. Transportation Theory and
Practice. 3 credit hours. Extensive introductory study of principles, practices, and problems of the transportation function and its role in the distribution process. Two hours of lecture-discussion weekly, plus individual consultations. Extensive reading and individual research projects.

## Trn 550. Physical Distribution Manage-

 ment. 3 credit hours. Analysis of transportation and logistics problems of industrial and commercial firms, including inventory and warehouse management, management of private transportation facilities, location problems, and relationship of physical distribution functions to other functions of the firm. Prerequisite: Trn 549, or consent of instructor.Trn 551. Transportation Policies. 3 credit hours. Effects of major formal and informal transportation policies on carriers, transport users, and the general public. Implications of alternative policies; how policy changes are effected. Prerequisite : Trn 549, or consent of instructor.

## Business Environment

BE 501. Research. Credit hours to be arranged. No-grade course.
BE 503. Thesis. Credit hours to be arranged. No-grade course.
BE 507. Seminar. Credit hours to be arranged.
Legal Aspects of Business Regulation. Foreign Commercial Law.
BE 517. Legal Environment of Business. 3 credit hours. Designed to provide a basic legal background for the study of business administration; contracts, agency, business organization, and fields within the framework of the Uniform Commercial Code; international aspects of law and business.

## BE 519. Social Philosophy of Business.

 3 credit hours. Ethical and social obligations which businessmen are expected to assume, critical considerations of presuppositions, opinions, and practices manifest in business enterprise and in business education. Not offered 1978-79, 1979-80.BE 520. Foreign Commercial Law. 3 credit hours. Basic legal concepts applicable to commercial transactions in foreign trade ; comparison of commercial law and legal institutions of foreign countries and the United States; major legal systems, including civil law and common law; legal documents involved in foreign-trade transactions; antitrust problems in international trade.

## Institute of Industrial and Labor Relations

Eaton H. Conant, Ph.D., Professor of Management, and Director. The Institute of Industrial and Labor Relations, University of Oregon, offers an integrated, multi-disciplinary progran leading to a master's degree in Industrial Relations. In close consultation with faculty advisers, students elect an integrated program with a choice of courses in economics, management, political science, sociology, and other disciplines listed below.

The program leads to the M.S. or M.A. degree, and requires 45 credit hours of work with thesis in courses approved by the Institute, or 54 hours of work without thesis. The program must cover at least three disciplines and must provide for at least 18 hours of work in one of the disciplines. At least 15 hours of the 45 or 54 must be in courses numbered 500 or higher.
The prerequisites for the program are a baccalaureate degree and 27 credit hours of prior work in the disciplines represented in the graduate program. The Institute may require that applicants submit Graduate Record Examination scores or a comparable objective test with a score satisfactory to the Institute. Applicants will be specifically notified when examination scores are needed.

The program prepares students for careers in government, management, or with trade unions. Fields of concentration may include nions, management, and labor relations policy; manpower utilization and development ; organizational studies and human resource management.

A primary program objective is the development of integrative appreciations of human resources in advanced industrial society-from the adversary perspective of management and unions, from the economics and behavioral sciences perspectives, and from the institutional perspective of public policy and national welfare. Basic courses for each area of concentration will generally include collective bargaining, labor economics, and human resources management, plus appropriate work in supporting social sciences.

It is also a program objective to provide students with opportunities to perform research or to intern with public or private institutions concerned with labor and manpower problems. The Institute also attempts to arrange work-study and internship programs so students can participate in industrial
relations and manpower activities complementary to their academic studies. Students are admitted to the progrann at the beginning of any of the four terms of the year.

The following University courses are especially relevant to the graduate program in Industrial and Labor Relations:

Economics: Regional Economics (Ec 414G) ; Urban Economics I (Ec 415G) ; Urban Economics II (Ec 416G) : Economy of the Pacific Northwest (Ec 418 g ) ; Labor Economics (Ec 444G) ; Issues in Labor Economics (Ec 445G) ; Collective Bargaining in Public Policy (Ec 446G) ; Economic Development (Ec 457G, 458G, 459G) ; The Economics of Industrial Organization (Ec 460G) ; Industrial Organization and Public Policy (Ec 461G) ; The Evolution of Modern Economic Analysis (Ec 472G) ; American Economic History (Ec 487G, 488G) ; Development of Industrial Economies (Ec 490G, 491G, 492G).

History: American Labor Movement (Hst 479G) ; American Economic History (Hst 487G, 488G, 489G). Journalism: Journalism and Public Opinion (J 494g).

Lazv: Law, Its Processes and Functions (L 430g) ; Law Courses for Nonlaw Students (L 504) ; Labor Law
I (L 559) ; Labor Law II (L 560).
Political Science: Administrative Organization and Behavior (PS 412G) ; The Politics of Bureaucracy (PS 413G) ; Unionization of Public Employees (PS 417G); Elections and Opinions (PS 452G, 453G) ; Democratic Processes (PS 456G) ; Political Behavior (PS 470) ; Allocation of Justice (PS 483G) ; The Policy Process (PS 488).

Management: Compensation Administration (Mgt 413G) ; Employment Policies and Practices (Mgt 414g) ; Operations Planning and Control (Mgt 429G) ; Development of Management Thought (Mgt 480G) ; Quality of Working Life (Mgt 531) ; Work Group Behavior (Mgt 533); Human Resources Management (Mgt 534); Organizational Psychology (Mgt 535) ; Motivation and Work Behavior (Mgt 537) ; Collective Bargaining (Mgt $539)$; Public Policy and the Employment Relationship (Mgt 540) ; Theory of Business Organization (Mgt 541, 542).

Sociology: Theory of Small Groups (Soc 430) ; Urbanization and the City
(Soc 442) ; Sociology of Race Relations (Soc 445G) ; Sociology of Work (Soc 446G) ; Industrial Sociology (Soc

447G) ; Social Stratification (Soc 451G).

Psychology: Human Performance (Psy 436G) ; Social Psychology I (Psy 456G) ; Social Psychology II (Psy 457G) ; Social Psychology (Psy 517).

Interdisciplinary Studies: Research (ISt 501) ; Readings in Industrial Relations (ISt 507) ; Seminar in Industrial Relations (Soc 507).

Research Skills: Statistical and Quantitative Methods in Psychology (Psy 511, 512, 513) ; Econometrics (Ec 493, 494, 495).

The Institute of Industrial and Labor Relations provides advice and assistance to doctoral candidates who are interested in work in industrial relations as a minor field or as a supplement to their major program.


# Wallace School of Community Service and Public Affairs 

Richard J. Hill, Ph.D., Dean, Professor of Sociology, Professor of Community Service and Public Affairs. A.B., 1950, M.A., 1951, Stanford ; Ph.D., Washington, 1955.
Bryan T. Dozenes, Ph.D., Associate Dean, Professor of Community Service and Public Affairs. B.S., 1962, M.S., 1963, Oregon ; Ph.D., Washington University, St. Louis, Missouri, 1966.
The Lila Acheson Wallace School of Community Service and Public Affairs is a professional school which prepares undergraduate and graduate students for careers in community service, public affairs, and international development. The School was organized in 1967.
To be admitted as an undergraduate or graduate major in the School of Community Service and Public Affairs (CSPA), the student must formally apply to CSPA. Admission is based on specific criteria which will require planning. The University's Academic Advising Office will help new and transfer students with such planning. Premajor status does not, however, guarantee admission to the School as an undergraduate major.

CSPA offers both the Bachelor of Arts and Bachelor of Science degrees. Two master's programs, Public Affairs and International Studies, are administered by the Public Affairs Graduate Division; students may earn either the Master of Arts or the Master of Science Degree.

The student who wants to complete a degree in CSPA must demonstrate general understanding of the social and behavioral sciences. Students are also encouraged to take work in the humanities, fine arts, and sciences when it contributes to their understanding of community problems and problemsolving.

Many of the courses offered by the School are open to nonmajors. Not all courses are offered each term, and students should consult the Time Schedule of Classes for details about available classes. All CSPA courses are open to both men and women.

## Community Service and Public Affairs

 Undergraduate Program
## Faculty

Bryan T. Downes, Ph.D., Associate Dean and Chairman, CSPA Instructional Programs, Professor (urban politics, policy making and implementation processes, policy analysis and evaluation, political change/change politics, community problem solving) ; B.S., 1962, M.S., 1963, Oregon ; Ph.D., Washington University, St. Louis, Missouri, 1966.
Judith Coffey, M.A., Instructor (experiential field study, group process, curriculum development). B.A., Knox College, 1963 ; M.A., Oregon, 1973.
Orval Etter, J.D., Associate Professor (public law, metropolitan government). B.S., 1937, J.D., 1939, Oregon.

Richard A. Fehnel, Ph.D., Assistant Professor (organizational change, field learning, public policy analysis, comparative administration, public management.) B.A., 1960, M.P.A., 1965, Washington ; Ph.D., 1974, Cornell.
Sally Fullerton, Ph.D., Associate Professor of Community Service (field instruction, interpersonal relationships, behavioral analysis). B.S., Oregon State, 1956; M.A., Cornell, 1960 ; Ph.D., Oregon, 1970.
Mary Harvey, Ph.D., Assistant Professor (manpower policy, community development, social action programming, educational innovation). B.A., 1961, M.A., 1964, San Jose State ; Ph.D., Oregon, 1972.
Richard J. Hill, Ph.D., Dean, Professor of Sociology, Professor of Community Service and Public Affairs (methodology, social psychology, formal theory). A.B., 1950, M.A., 1951, Stanford; Ph.D., Washington, 1955.
Carl J. Hosticka, Ph.D., Assistant Professor (applied research; policy process, analysis, development; administration of justice). B.A., Brown, 1965 ; Ph.D., Massachusetts Institute of Technology, 1976.

Carol Johansen, M.S., Instructor (field instruction, career planning) ; Director, Field Internship Program. B.S., Oregon, 1975, M.S., Oregon, 1978.
James G. Kelly, Pl.D., Professor of Psychology, Professor of Community Service and Public Affairs (human ecology and methods of social intervention). B.A., Cincinnati, 1953 ; M.A., Bowling Green, 1954; Ph.D., Texas, 1958; S.M., Harvard, 1960. (On leave 1978-79.)
Gary Koyen; Ph.D., Assistant Professor (research design and methods, program evaluation and policy analysis, management, and organization change theory). B.A., 1967, M.A., 1968, Ph.D., 1975, Nebraska.
Myra Miller, S.W. Diploma, Associate Professor of Community Service (field instruction, volunteerism). B.A.,
Washington, 1937 ; Diploma, New York School of Social Work, 1939.
Lynn Passy, M.A., Assistant Professor (community development, primary prevention, community mental health, social support systems). B.A., 1966, M.A., 1968, Oregon.

Norman Sundberg, Ph.D., Professor of Psychology; Professor of Community Service (clinical, personality, and community psychology). B.A., Nebraska, 1947; M.A., 1949, Ph.D., 1952, Mininesota.
Carmelita Thomson, M.S.W., Visiting Assistant Professor (social work, children's services). B.A., Georgia State, 1970; M.S.W., San Francisco State, 1973.
Clarence E. Thurber, Ph.D., Professor of International and Public Affairs (comparative administration, administration of U.S. foreign policy, Latin America). B.A., 1943, Ph.D., 1961, Political Science, Stanford.
Kenneth Viegas, M.S.W., Associate Professor of Community Service (corrections, social work). B.S., Oregon, 1956; M.S.W., California, 1963.

CSPA offers undergraduate preparation for professional careers in community service and public affairs. Within this undergraduate program, students may
concentrate or specialize in human service delivery, public management and planning, program and policy development-evaluation, and in community development or social action programming or both.

CSPA provides professional education for service to the public, both in entry-level positions and as part of a life-long learning process. The School serves a diverse group of students, including those who have limited experience outside of educational institutions and those who re-enter the formal educational process with extensive experience in other roles. A major part of CSPA's mission is the interpretation and conduct of research for the solution of practical problems in the social life of individuals and communities.

Undergraduate professional education in CSPA is interdisciplinary: (1) Core and concentration area courses within CSPA emphasize the integration of theory and knowledge from multiple social science disciplines; (2) the School hires faculty from diverse disciplines, each of whom has interests and knowledge outside his or her major discipline. It is also applied and problem-centered: (1) Theory is studied in settings and projects which permit practical application and development of knowledge ; (2) social science theory and professional experience are applied to the study and resolution of identified community problems; and (3) faculty and students are involved in research oriented to the solution of public problems. Finally it is carcer oriented: (1) Field projects and experiences introduce students to a range of career settings, options, and roles ; (2) formal courses prepare students for baccalaureate-level entry into career roles and settings of service to the public (as well as for postbaccalaureate study) ; and (3) courses, fieldwork, and the advising process emphasize continual examination of ethics and values characterizing service to the public.

Undergraduate education in CSPA is organized in three stages:

Stage 1-Entry and Educational Planning. Following admission into CSPA, each student fulfills the following requirements. (1) Constructs a plan to guide his or her studies utilizing resources in CSPA and elsewhere, on campus and in the community. These learning contracts are developed in seminars carrying 2 credit hours taught by faculty advisers ; the contracts form the basis for each student's undergraduate education, and help develop
skills in planning and resource utilization. (2) Gains experience, through observation or participation, about community problem-solving processes in field settings. This requirement may be satisfied in two ways. Students may be granted credit for fulfilling the requirements of a course in Field Observation, or students may fulfill this requirement through prior experience. (3) Identifies issues in professional practice and develops a knowledge of problem-solving techniques utilized in professional practice and services to the public. A course such as the 3 -credit Issues in Professional Practice will meet this requirement.

Stage 2-CSPA Core. Each student completes a total of 17 hours of credit in courses distributed among the following core areas: Public Service Management, Community Problem Solving, Interpersonal ProblemSolving Methods, Applied Research and Evaluation; and Public Service Policy and Programs. Each core course is required and specifically designed to meet the goals outlined above (i.e., be interdisciplinary, applied, problemcentered, and field-oriented). Generally, CSPA core courses are taught by CSPA faculty. An additional 15 hours of credit in Field-Based Learning Component is integral to the core.

The required Field-Based Learning Component ( 15 credits), consists of at least 12 credits in CSPA 409, Supervised Field Experience (available in one term through year-long field placements), plus at least one term of CSPA 411, Theory Practice Integration Seminar, taken in conjunction with a field placement. Field experience appropriate to undergraduate education includes: placements in agency settings, negotiated revisions of ongoing work, supervised field-based research, or community organization activities, and so on, as consistent with a student's educational plan. Theory Practice Integration Seminars are offered in each of CSPA's concentration areas Public Management and Planning, Human Service Delivery, Policy and Program Development-Evaluation, and Community Development and Social Action Programming.

Stage 3-Concentration Area Studies and Senior Project. There are four concentration areas within CSPA: Public Management and Planning, Human Service Delivery, Policy and Program Development-Evaluation, and Community Development and Social Action Programming. To further define their concentration studies, CSPA students associate one (or more)
of these concentration areas with settings, populations, levels of government, and problems of particular interest. Concentration studies are fulfilled through a minimum of 18 credit hours of appropriate courses in CSPA and in other departments. Students rely heavily on offerings in other University departments to complete their concentration studies.

Senior Project. Each student completes a variable credit ( 3 to 12 hours) senior project, which may be a second field placement, an applied research project, or a policy paper to complete his or her concentration area. Typically, this will be done under the direction and supervision of a CSPA faculty member. The senior project demonstrates a student's ability to apply multiple social science perspectives to the solution of community problems.

CSPA administers the Law Enforcement Education Progran and offers a number of courses in the Administration of Justice area. These courses are designed for in-service and pre-service students at both the graduate and undergraduate levels.

The School of Community Service and Public Affairs, in cooperation with Lane Community College, implements academic and in-service training for paraprofessional mental health and human service workers. The program emphasis is the development of diverse career opportunities in community mental health. The New Careers staff works with local human service agencies to develop training programs to meet service needs.

Degrees offered are the Bachelor of Arts or the Bachelor of Science in Community Service and Public Affairs.
Admissions and Advising: Students interested in a community service and public affairs major will not be admitted to that program until they have been selected through a formal admissions process. Majors are accepted for fall and winter terms only. Students applying to CSPA for undergraduate admission are expected to submit by April 1 (for fall term), or November 1 (for winter term) the following materials: (1) A CSPA Undergraduate application form ; (2) A statement of career goals ; (3) A narrative of previous work and life experiences as either a provider or consumer of services to the public or both; and (4) Official Transcripts. Application forms and information about admission criteria may be obtained from the CSPA office. Students applying for admission are expected (1) to be nearing completion of their sophomore
year (90 credit hours) ; (2) to have career goals that are consistent with professional preparation in Community Services or Public Affairs; (3) to have effective communication skills, and (4) to have broad background preparation in the social sclences. Social science preparation should include courses in psychology, sociology, economics, political science, and anthropology. In admission selections, preference will also be given to students who have demonstrated interest in the community through volunteer or work experience, or who have particular life experiences which give them valuable perspectives on working in services to the public.

Preadmissions advising is provided by the University's Academic Advising Office. Once a student has been formally admitted into the progrann, a regular CSPA faculty adviser is assigned.

## Undergraduate Courses

CSPA 201. Introduction to CSPA. 3 credit hours. Survey of issues and functions appropriate to persons in public administration, planning, and direct helping service roles in the field of human services. Includes focus upon environmental factors necessary for prevention of individual and community problems: Outside class activities and individual and small-group projects.
CSPA 230. Field Observation. 2 credit hours. An introduction to human service agencies in the areas of community services, public affairs, and leisure services. The student visits several agencies during the term to gain first-hand experience with a variety of agency settings and career patterns.
CSPA 315. Behavioral Foundations for the Helping Professions. 3 credit hours. Human behavior from the perspective of the helping professions. Behavior change as a function of learning; the professional as a learning facilitator. Locus of control, attribution, cognitive style, and other psychological concepts as they relate to professional practice.

## CSPA 321. Public Administration Con-

 cepts. 3 credit hours. Introduction to concepts, processes, and methods involved in the administration of public agencies and institutions.CSPA 323, 324. Strategies of Intervention. 5 credit hours each term. Basic principles of generic problem-solving process related to individual interactions, small group, organizational, and community functioning. Study and practice in the use of skills and techniques for working with individuals, groups, organizations, and communities. CSPA majors only. CSPA 328, 329. Applied Social Research. 3 credit hours each term. Introduction to social research in community, agency, and governmental settings. Descriptive and experimental methods, sampling, research design, data collection, hypothesis testing, statistical analysis, research proposal and report writing.
CSPA 335. Advocacy Rights and Responsibilities. 3 credit hours. The nature of
advocacy ; settings and roles in which advocacy is essential. Rights, responsibilities, ethics, and values of professionals in an advocacy role. Skills and techniques of advocate in a bureaucracy ; bureaucratic organizationss at city, county, and state levels.
CSPA 357. Introduction to Public Law and Legal Research. 3 credit hours. Place of public law in American legal system. Legislative, administrative, and judicial institutions and processes. Legal research useful to the notilawyer.
CSPA 358. Introduction to Public Policy Antalysis. 3 credit hours. Processes by which public policy is formulated, implemented, and evaluated; principal groups of actors involved in these processes ; analytic models for determining incidence of costs and benefits of policy.
CSPA 370. National Development. 3 credit hours fall. This course is designed to introduce the student to the political, economic, and social problems of the new nation states.
Since the primary aims of these new states are economic, social and political development, the course focuses on some of the primary factors affecting this development.
CSPA 371, 372. International Community Development. 3 credit hours each term. Introduction to basic theories of communities and their development. Examination of the critical skills needed for effective community development work with a focus on the particular problems encountered in cross-cultural settings. Supervised participation in a community development project in the field.
CSPA 400 . SEARCH. 1-3 credit hours.
CSPA 406. ESCAPE Community Services. $1-9$ credit hours. Offers students opportunity to explore career possibilities in communityservice agencies. A wide range of field settings are offered and include drug and corrections counseling, senior citizen advocacy, counseling in halfway houses for the mentally retarded and mentally disturbed, and community recreation centers. Open to all majors. Concurrent enrollment in CSPA 407 ESCAPE Volunteer Training Seminar is required for all first-term volunteers.
CSPA 407. Seminar: ESCAPE Volunteer Training. 1 credit hour. Problem-solving, and concepts in program development and client advocacy ; communication skills, group process, strategies of intervention, creative problem-solving, interviewing skills, roleplaying, and program evaluation. Open to all majors. Concurrent enrollmient in CSPA 406 ESCAPE Community Services is required.
CSPA 407. Seminar: ESCAPE Field Supervision. 4 crédit hours. ESCAPE field coordinators develop supervision skills, curriculum design, problem-solving strategies, and leadership abilities. Participants are encouraged to become the advocate of the field volunteer. Public relations, seminar curriculum development, and field experience evaluation are primary responsibilities. Prior experience in volunteerism is a prerequisite. Open to all majors. Involves supervision of CSPA 406 ESCAPE Community Services field sites and volunteer participation.
CSPA 409. Practicum. Supervised Field Study. An integral part of the CSPA curriculum required of all students, which is planned in relation to the student's total course of study. Field Instruction provides the opportunity for students to work in a community setting under agency and faculty supervision. Open to CSPA majors only.
CSPA 411, 412. Theory-Practice Integration. 3 credit hours each term. A required
component accompanying field instruction which combines presentations by the faculty instructor, readings and discussions designed to help the student integrate previous course work, and experience with the field placement.

## Upper-Division Courses Carrying Minor Graduate Credit

CSPA 401. Research. (g) Credit hours to be arranged.
CSPA 403. Thesis. (g) Credit hours to be arranged.
CSPA 405. Reading and Conference. (g) Credit hours to be arranged.
CSPA 406. Special Problems. (g) Credit hours to be arranged.
CSPA 407. Seminar. (g) Credit hours to be arranged except as noted otherwise.
CSPA 408. Workshop. (g) Credit hours to be arranged.
CSPA 409. Supervised Field Study. (g) Credit hours to be arranged ; 15 hours maximum. Participation in the activities of public or private community agencies and organizations, under close supervision ; coordinated instruction. Consent of instructor is required.
CSPA 410. Experimental Course. (g)
Temporary studies may be set up under this number for a short-term trial. Topics offered have been Child Abuse ; Crisis Intervention; Primary Prevention.
CSPA 411, 412. Theory-Practice Integration. (g) 1-3 credit hours each term. Introduction to the organization, character, and conduct of community and public agency programs as a link between theoretical concepts and participation in supervised field study. Consent of instructor is required.
CSPA 420. Behavioral Ecology. (g) 3 credit hours. The study of human behavior in natural settings and the interaction between social and physical environments. Covers such topics as personal space, territoriality, spatial relations in different cultures, symbolic meaning of physical environments, behavioral results of crowding, and the implications for social institutions, buildings, and environmental planning.
CSPA 428. Casework Methods. (g) 3 credit hours. Theory and methods in helping individuals and families from the viewpoint of the social work profession. Social casework as an art in which knowledge of the science of human relations and skill in relationships are used to mobilize capacities in the individual and resources in the community appropriate for better adjustment between the person or family and all or any part of his or her total environment.
CSPA 430. Group Work Methods. (g) 3 credit hours. Theory and techniques of working with groups in community-service and public-affairs programs ; emphasis on development of practical group-work skills. Prerequisite: CSPA 323.
CSPA 431. Counseling Interview. (g) 3 credit hours. Experience-based skill development for counseling in a variety of settings in the helping professions. Conceptual focus on acquiring a practical, integrative framework for counseling : roles, behavioral themes and goals as experienced by clients and counselors. Prerequisite: CSPA 323.
CSPA 432. Communication: Nonverbal. (g) 3 credit hours. Interpersonal communication at a nonverbal level. Signs and signals; listener responses. Uses and misuses of nonverbal channels.

CSPA 433. Organizational Communication. (g) 3 credit hours. Development of adaptive and maladaptive systems of communication within and between organizations. Formal and informal communication channels. Techniques for clarifying and improving organizational communications and communication network.
CSPA 435. Developmental Counseling. (g) 3 credit hours. An exploration of starting assumptions and concepts basic to the process of developmental counseling. A foundations (theory-oriented) course in professional counseling aimed at the normal individual's optimal development.
CSPA 437. Volunteerism. (g) 3 credit hours. Introduction to an expanding area of human service for those who are interested in increased understanding and skill in their own volunteer activities, and for those who may wish to explore career opportunities in volunteerism. Philosophy and historical perspective of the volunteer movement; practical aspects of developing and maintaining effective volunteer programs. Students will be required to be directly involved in on-going or short-term volunteer activity during the term.
CSPA 440, 441. Social Weifare Institutions: Policies and Programs. (g) 3-5 credit hours each term. The histories, structures, policies, and services of the major social welfare programs; a critical analysis of the policy-making process in social welfare services and its application to current programs and new proposals.
CSPA 442. Social Adaptation. (g) 3 credit hours. Theory and method's for designing preventative and social programs for the community level. Specific community programs are designed by students working in small groups and evaluated by citizens. Prerequisite: CSPA 430, 448.
CSPA 444; 445. Correctional Systems. (g) 3-5 credit hours each term. Role of corrections in the criminal-justice system. Examination of major components, processes and methods of adult and juvenile correctional systems, including probation, institutions, parole and related services. Some historical, but primarily contemporary focus. Modern treatment programs and techniques illustrated by readings, case studies, and field visits. Consent of instructor is required. Prerequisite : Soc 440 .
CSPA 446. Child Welfare Services. (g) 3 credit hours. History and analysis of child welfare services as they have developed in Western society. Focus on the social work value system and philosophy as it is applied to child welfare services. Analysis of public and private child welfare agencies within the context of Oregon and the United States.
CSPA 44\%. Community Organization and Social Planning. (g) 3-5 credit hours. Theory and methods used in working with organizations and communities. Citizen participation, social action, social legislations, community relations, and other organizational techniques; social planning processes and approaches to social problems; projects by class members analyzed. Prerequisite: CSPA 323, 324.
CSPA 448. Community Mental Health. (g) 3 credit hours. Communities are studied as functional bodies. Disorganization or breakdown within the system can result in damage to any of its subcomponents; organizations, small groups, and individuals.
Note: The following courses do not carry graduate credit for Public Affairs and International Studies master's students.
CSPA 450. Public Financial Administration. (g) 3 credit hours. Budgetary decision
and control processes in a variety of public organizations ; their relationship to allocation of public resources to accomplish public purposes; problems of taxation, planning, budgeting, controlling and evaluating government activities.

## CSPA 454. Public Management. (g) 3

 credit hours. Nature of the public manager's role in a complex society. Review of philosophical foundations of organizations; review of evaluation of organizations and management theory. Systems view used ; analysis of goals, values, technical, structural, psychosocial and managerial subsystems of public organizations.CSPA 455. Theory of Public Organization. (g) 3 credit hours. Exposes students in public affairs and administration to a variety of models and theories-both empirical and normative-of the organization of public affairs and policy-making structures in the contemporary American polity. Theories to be examined are : the classical democratic model of the body politic and its relation to contemporary bureaucratic forms of decision-making ; the pluralist or polyarchal model of the organization of public affairs; and contemporary futuristic and reform-oriented models.

## Public Affairs

and International Studies Graduate Programs
Faculty
Bryan T. Downes, Ph.D., Associate Dean and Chairman, Graduate Division of Public Affairs; Professor (urban politics, policy making and implementation prociesses, policy analysis and evaluation, political change/change politics, community problem solving). B.S., 1962, M.S., 1963, Oregon; Ph.D., Washington University, St. Louis, Missouri, 1966.
Orval Etter, J.D., Associate Professor of Public Affairs (public law, metropolitan government). B.S., 1937, J.D., 1939, Oregon.
Richard A. Fehnel, Ph.D., Assistant Professor (organizational change, field learning, public policy analysis, comparative administration, public management. B.A., 1960, M.P.A., 1965, Washington ; Pl.D., 1974, Cornell. Mary Harvey, Ph.D., Assistant Professor (manpower policy, community development, social action programming, educational innovation). B.A., 1961, M.A., 1964, San Jose State ; Ph.D., Oregon, 1972.
Richard J. Hill, Ph.D., Dean, Professor of Sociology, Professor of Community Service and Public Affairs (methodology, social psychology, formal theory). A.B., 1950, M.A., 1951, Stanford ; Ph.D., Washington, 1955.
Carl J. Hosticka, Ph.D., Assistant Professor (applied research ; policy process,
analysis, development ; administration of justice). B.A., Brown, 1965 ; Ph.D., Massachusetts Institute of Technology, 1976.

Gary Koyen, Ph.D., Assistant Professor (research dèsign and methods, program evaluation and policy analysis, management, and organization change theory ). B.A., 1967, M.A., 1968, Ph.D., 1975, Nebraska.
Clarence E. Thurber, Ph.D., Professor of International and Public Affairs (comparative administration, administration of U.S. foreign policy, Latin America). B.A., 1943, Ph.D., 1961, Political Science, Stanford.

## Faculty Emeriti

John F. Gange, M.A., Professor Emeritus of International and Public Affairs (U.S. foreign policy, economic assistance, Southeast Asia). B.A., 1932, M.A., 1934, Political Science, Stanford ; at Oregon since 1960.

## Adjunct Faculty

The Division regularly employs practicing public managers to teach specialized course content. The following Bureau of Governmental Research and Career Information System personnel also offer courses in public affairs.
Donald N. Johnson, B.A., Associate Director of Bureau with rank of Professor (regional planning and governmental systems, state and local government and economic development). B.A., Reed College, 1946. Robert E. Keith, M.Arch., Planning Consultant with rank of Professor (urban and regional planning). B.S., 1944, Kansas State ; M.Arch., 1950, Oregon.
James M. Mattis, J.D., Legal Consultant with rank of Assistant Professor (public law). B.A., 1964, Central Washington State College; J.D., 1967, Washington.
Bruce McKinlay, Ph.D., Research Associate with rank of Associate Professor (employment information systems, labor and manpower economics). B.S., 1958, M.A., 1967 , Ph.D., 1971, Economics, Oregon.
J. David Rowe, B.A., Planning Consultant with rank of Professor (land use and economic development in small communties and rural areas). B.A., 1955, Park College.
Karen Seidel, B.A., Planning Assistant with rank of Assistant Professor (data systems). B.A., 1957, Knox College.
Kenneth Tollenaar, M.A., Director of Bureau with rank of Professor (state
and local administration, personnel administration). B.A., Reed, 1950; M.A., Public Administration, Minnesota, 1953.
A. Mark Westling, B.S., Planning and Public Works Consultant with rank of Professor (planning and public works). B.S., 1943, Washington.

The Graduate Division of Public Affairs administers graduate programs in Public Affairs and International Studies. Both programs utilize the same core curriculum and each adds the flexibility of interdisciplinary study. These programs are designed for those interested in entry- and mid-level positions and careers in public service.

These programs are increasingly attracting nontraditional students. Approximately one-half of CSPA students attend on a full-time basis; the other one-half attend part-time and are usally in-service career people. Students tend to be older and have two to five years professional experience.

Students enrolled in these programs are expected to work toward competence in the following areas: community dynamics and change processes, policy analysis, applied research, management processes, individual and interpersonal relationships in organizational settings, and public interest values and ethics.

In Public Affairs, the degrees offered are Master of Arts and Master of Science. A minimum of 45 credit hours of graduate work is required. Academic background and work experience of newly admitted students are scrutinized to determine if additional academic preparation is needed prior to formally beginning the program. Students are required to: (a) take 12 credit hours from core course offerings; (b) take an additional 6 credit hours from management processes offerings; (c) undergo a mid-program review; (d) undertake a supervised field internship if they do not have sufficient relevant career experience; and (e) complete an exit project (thesis, policy or issue paper). In addition, students are encouraged to take a maximum of 18 credit hours in a chosen field of concentration. More than one concentration area can be developed.

In International Studies, there is a Master of Arts program offered for students who contemplate careers in foreign affairs or in international organizations. Students electing to pursue this degree are expected to follow the requirements outlined for public affairs students. However, their concentration will be developed from
courses dealing with a geographical (e.g., Far East, Latin America) or functional (e.g., public administration in developing countries, international trade and development) area.

Inquiries regarding these programs should be directed to the Chairman, Graduate Division of Public Affairs, CSPA.

## Upper-Dizision Courses Carrying Major Graduate Credit

Note: Master's candidates enrolled in the Public Affairs Graduate Division can receive graduate credit only for upper-division courses listed with a capital (G) in the Public Affairs Graduate Division or with a small (g) in CSPA or other University programs.
CSPA 407. Seminar. (G) Credit hours to be arranged.
Human Service Program Administration
Manpower Program Planning.
Evaluation of Planning.
The Elected Official.
Social Indicators.
Public Works Administration.
Urban Growth Management.
Grant Writing.
Fund Accounting.
Program Evaluation.
Health Planning.
Health Policy.
Small Cities Management.
Managing the Modern City.
Organizational Development.
Poverty Policy.
Community Dispute Resolution.
Criminal Justice Policy.
CSPA 408. Workshop. (G) Credit hours to be arranged.
CSPA 410. Experimental Course. (G)
CSPA 457. Legal Issues for Public Admin-
istrators. (G) 3 credit hours. Examines
major legal issues of concern to administrators, including personal responsibility and accountability, public hearings, open competitive bidding, public rights to know and records privacy, administrative rules and regulations, conflicts of interest, administrative flexibility and legislative intent, and equal service to citizens. Role of legal council in the administrative process.

## CSPA 458. Policy Development and

 Evaluation. (G) 3 credit hours. Strategies for choice in policy alternatives, policy and program impact, measurements and evaluation with emphasis on the roles and resources of administrative agencies in processes of analysis.CSPA 460. Public Personnel Administration. (G) 3 credit hours. Basic principles, practices, and issues of public personnel administration. The role of merit systems, staffing, compensation, public service ethics, and collective bargaining in public management systems.
CSPA 461. Citizen Participation. (G) 3 credit hours. Examines roles of the news media in determining priorities, effect and flow of public issues, relationships of interest groups to citizen participation. Effects on policy making, program planning, and bureaucratic behavior. Techniques of executive response : public hearing, early involvement, conduct of citizen-advisory panels, role of the ombudsman.
CSPA 463. Administration of Metropolitan Areas. (G) 3 credit hours. Current problems of government in metropolitan areas, pro-
posals and operations for solving contemporary metropolitan problems.

## CSPA 465, 466. Administration of State

and Local Government. (G) 3 credit hours.
Policy-making and policy-administering process within American states. Intergovernmental relationships, federal, state and local ; state political processes, program responsibilities, organizational features, and administrative problems.
CSPA 467. Effective Leadership in Public Service Organizations. (G) 3 credit hours. Reviews various approaches to understanding leadership in public service organizations. Analyzes individual leadership patterns and develops skills and understanding of effective leadership styles in the work environment.
CSPA 468. Federal Public Administration: Departments and Agencies. (G) 3 credit hours. The structure, features, and relationships of the major federal departments and agencies analyzed in terms of major policy implications and power relationships. Also considers selected aspects of the regulatory process at the federal level. (No credit if credit received for PS 468.)
CSPA 469. Federal Public Administration:

## Intergovernmental Relations and the

Regulatory Process. (G) 3 credit hours.
The major aspects of federal relationships with state and local government, with emphasis on changing responsibilities for planning, implementing, and evaluating human service delivery programs. Consideration of new trends in federalism, such as revenue-sharing. (No credit if credit received for PS 469.)
CSPA 470. Comparative Bureaucracy in
Developing Countries. (G) 3 credit hours. Study of bureaucratic institutions and functions in developing countries. Western bureaucratic models are examined: The Weberian "ideal type," the Anglo-American, the Latin, and the Soviet. Their transfer and transformation through colonialism and technical assistance to Asia, Africa, and Latin America are detailed. Bureaucracy is viewed both as a goalsetter (above or to one side of politics) and as a contender for power, with uncertain results for development programs.
CSPA 472. National Planning. (G) 3 credit hours. Cultural setting, and political, economic, and social institutions of India examined to see how they are being transformed.
The government's planning commission and the planning process evaluated as major agents of change. The problems of development in various sectors (agriculture and community development, industrialization, urbanization, education) analyzed. A "planning exercise" is undertaken in which students act as substantive experts on the Indian Planning Commission and compete for budgetary resources.
CSPA 474. Aid to Developing Countries. (G) 3 credit hours. Origins and growth of bilateral and multilateral aid programs to the developing countries examined, with special attention to the United States program of aid with supplementary attention to the United Nations and other programs. Cross-cultural political and administrative problems of aid programs stressed. A simulated international negotiation of next year's aid program to India concludes the course.

## Graduate Courses

CSPA 501. Research. Credit hours to be arranged. No-grade course.
CSPA 503. Thesis. Credit hours to be arranged. No-grade course.
CSPA 505. Reading and Conference.Credit hours to be arranged.

CSPA 506. Special Problems. Credit hours to be arranged.
CSPA 507. Seminar. Credit hours to be arranged.
Internship.
CSPA 508. Workshop. Credit hours to be arranged.
CSPA 509. Supervised Field Study. Credit hours to be arranged.
CSPA 510. Experimental Course.
CSPA 520, 521. Research Methods I, II.
3 credit hours. How to commission, execute and evaluate research in the public sector. Each student will carry out an original research project from the problem formulation stage through the data analysis stage.
CSPA 524. Public Organization Theory. 3 credit hours. Structure and process of organizations as they change in modern industrial society; processes of individual and group interaction within organizations, relations between the organization and its environment, the role of public organizations within the public at large.
CSPA 528, 529. Public Finance and Budgetary Administration. 3 credit hours each term. Concepts and practices of public revenue and expenditure processes including consequences of alternative taxing structures, revenue-sharing, public goals of taxing systems, the anatomy of major revenue-generating systems, the mechanics and policy issues in budget formulations, budgetary controls and management processes ; program evaluation and audit forms.
CSPA 532. Public Law. 3 credit hours. Introduction to public law of the United States in context of total legal system of the country. Focuses on legislation, administrative rulemaking and implementation of the law, judicial institutions and processes, case law, and the legal profession. Instructs students in how to conduct research in law and govern-ment-documents libraries.
CSPA 536. Public Policy Analysis. 3 credit hours. The policy process from early initiation to eventual termination. Conceptual and procedural tools for organizing and integrating the various elements of a policy context are linked to current experience. Alternative means for redesigning and creating more comprehensive procedures ; application of insight gained in preparation of student papers and projects.
CSPA 540. Public Affairs and Social Change. 3 credit hours. Analysis of the interaction between societal change and governmental action; theories of change ; factors which obstruct or facilitate political change; governments and bureaucracies as indicators of or reactors to demands for change ; and future change strategies.
CSPA 544. Human Behavior in Public Organizations. 3 credit hours. Integrates social science knowledge about people at work. Primarily focuses upon the concepts of human behavior important to managerial problems in the public sector.
CSPA 548. Public Management Accountability. 3 credit hours. Democratic traditions and practices, and the rule of law. Purposes and limitations of government as an instrument for fostering social and economic progress. Political direction and responsibility of administrations and administrators. Objectivity and rationality in the conduct of public affairs. Impartial inquiry and investigation of public needs and problems. Protecting and fostering individual rights, liberties, and welfare. Promotion of organizational effectiveness and equality. Measures to increase client and public participation in public policy
formulation. Standards of efficiency and effectiveness in the conduct of the public's business.
CSPA 554. Advanced Public Management. 3 credit hours. Examination of the public manager's role in relation to or ganizational politics, power, and authority, planning and control, problem-solving and decision-making, group dynamics, motivation and leadership, supervision, communication, evaluation, and managerial effectiveness.

## Independent Studies

## Faculty

Richard A. Fehnel, Ph.D., Committee Chairman, Assistant Professor. B.A., 1960, M.P.A., 1965, Washington; Ph.D., 1974, Cornell.
Bryan T. Dowmes, Ph.D., Professor B.S., 1962, M.S., 1963, Oregon; Ph.D., Washington University, St. Louis, Missouri, 1966.
James G. Kelly, Ph.D., Professor of Psychology, Professor of Community Service and Public Affairs. B.A., Cincinnati, 1953; M.A., Bowling Green, 1954; Ph.D., Texas, 1958; S.M., Harvard, 1960. (On leave 1978-79.) Lynn Passy, M.A., Assistant Professor. B.A., 1966, M.A., 1968, Oregon.

The Independent Study program provides opportunity for students to contract with the School of Community Service and Public Affairs for individually tailored two-year programs.

The program is offered as an educational alternative for individuals interested in an aspect of CSPA's curriculum which cannot be studied in existing academic programs. Students are encouraged to go beyond the standard confines of educational settings and utilize other learning environments. Current students in the program have designed contracts related to environmental studies, leisure programs, community development, student services, law enforcement, and gerontology.

Admission to the program is contingent upon: (1) meeting the basic requirements for admission to CSPA ; (2) finding a CSPA faculty sponsor ; and (3) arranging a learning contract with that sponsor which spells out methods by which personal educational goals will be achieved. Contracts are based upon students' academic and career goals and may lead to a B.S. or B.A. degree. All contracts are to be approved by the Independent Study Committee.

The learning contract must contain at least 36 hours of credit in CSPA ; there are no additional requirements upon the selection of courses or learning
experiences. Independent Study students are encouraged to become involved in some activity which is of service to the community or to CSPA as part of their educational experience.

## Career Information System

Bruce McKinlay, Ph.D., Director, Associate Professor (employment economics). B.S., 1958, M.A., 1967, Ph.D., 1971, Oregon.
Mary Kennedy Burton, M.S., Research Associate (communication and education research). B.A., Seattle University, 1968 ; M.S., Oregon, 1970.
John S. Clyde, M.S., Research Associate (school psychological services). B.S., South Dakota, 1969 ; M.S., Oregon, 1963.
Frances Miller, M.S., Research Assistant (occupational research). B.S., Northern State, South Dakota, 1966; M.S., Oregon, 1971.

Donna L. Mossler, B.S., Research Assistant (occupational information). B.S., Oregon, 1974.

Michael J. Neill, Ph.D., Assistant Professor (computer education, curriculum and instruction). B.S., Illinois, 1962; M.S., Cornell, 1966 ; Ph.D., Oregon, 1977.

Paul J. Philips, M.A., Research Assistant (political science). B.A., Chapman College, 1972; M.A., Whittier College, 1975.

Theodore A. Tynes, M.A., Research Associate (education administration). B.S., West Virginia State College, 1954 ; M.A., California, 1969.
The Career Information System (CIS), a statewide interagency consortium, provides current labor market and educational information in usable forms to individuals, schools, and social agencies in Oregon. The purpose is to improve career choices and training opportunities.

Career Information System enhances the efforts of agencies and schools involved in occupational counseling and education by collecting current labor market and educational information and developing it into usable forms; developing and managing delivery systems; consulting with user agencies on use of career information in counseling and instructional programs.

The office of the Director is on the University of Oregon campus; service is available in schools and agencies throughout the state. The Center also provides consulting services to career information systems in other states.

## Bureau of Governmental Research and Service

Kenneth C. Tollenaar, M.A. Director.
Donald N. Johnson, B.A., Associate Director.
Orval Etter. J.D.. Legal Consultant
Herman Kehrli, M.A., Director
Emeritus.
Robert E. Keith, M.Arch., Planning Consultant.
James M. Mattis, J.D., Legal Consultant.
J. David Rozre, B.A., Planning Consultant.
Karen M. Seidel, B.A., Planning Consultant.

Katherine L. Tri, B.A., Research Assistant.
Arnold M. Westling, B.S., Planning and Public Works Consultant.
The Bureau of Governmental Research and Service is a public service program of the University, established and maintained especially to serve Oregon state and local governments, as well as citizens, students, scholars, organizations, news media, and other individuals and agencies interested or involved in state and local government. The subject matter fields in which the Bureau conducts its programs include public finance, public law, public administration, planning, and public works. The Bureau conducts studies of state and local government policy problems;
compiles and disseminates data and background information on state and local government programs; provides consultation to local governments, state agencies, citizen groups, and other interested persons or agencies; sponsors training conferences and participates in training sessions or meetings sponsored by others; and undertakes special service activities at the request of specific government agencies on a cost-reimbursable basis. In addition to carrying on research, consultation, training, and service activities for state and local governments, Bureau staff members teach courses in the Wallace School of Community Service and Public Affairs. The Bureau also provides instructional support to various other academic departments.


## College of

## Education

The College of Education was established in 1910 as a School of Education. The change to a college became effective in 1968. In 1974, the College of Education was reorganized into three major divisions: Center for Educational Policy and Management, Division of Developmental Studies, and Division of Teacher Education. Each Division is administered by an Associate Dean, with Area Coordinators within the Divisions.

The College of Education offers degree programs at the baccalaureate, master's, and doctoral levels, and programs leading to Basic and Standard certification for elementary and secondary teachers and teachers of exceptional children. Information about specific programs is included in the appropriate divisional section of this catalog.

Graduate level offerings include certificate programs for school superintendents, elementary and secondary principals, school supervisors, counselors, special education personnel, and school psychologists and degree programs with a variety of specializations in Educational Psychology, Curriculum and Instruction, Special Education, and in Educational Administration, Educational Policy, and Higher Education.

Graduate work in education leads to the following degrees: Master of Arts, Master of Science, Master of Education, Doctor of Education, and Doctor of Philosophy.

The College of Education follows general University policy in its basic admission procedures for undergraduate and graduate study. In addition to the information regarding College programs contained in this catalog, students may obtain information regarding adnission and requirements for specific certification and endorsement programs from the Division Area office responsible for administering the program, and from the College's Office of Certification. Information regarding admission and program requirements for graduate study or degrees may be obtained from the College's Graduate Student Records Office.

The University of Oregon is accredited by the National Council for Accreditation of Teacher Education and
by the Oregon Teacher Standards and Practices Commission for the preparation of elementary and secondary teachers, school administrators, school personnel service specialists and special education personnel. Master's and doctoral degree programs in these fields are also accredited by the National Council.

The following education honorary societies have active chapters at the University: Pi Lambda Theta for women, and Phi Delta Kappa for men.

## Administrative Faculty

Robert D. Gilberts, Ph.D., Dean, Professor of Educational Administration (problems of urban schools, conflict management, general administration). B.S., Wisconsin State University at Eau Claire, 1950 ; M.S., 1955, Ph.D., 1961, Wisconsin, Madison.
Diane L. Reinhard, Ph.D., Assistant Professor of Education (research and evaluation methodology), Assistant Dean. B.S., 1965. M.S., 1969, Wisconsin, Milwaukee ; Ph.D., Ohio State, 1972.

Lloyd DuVall, Ph.D., Professor of Education, Associate Dean and Director, Center for Educational Policy and Management (identification and development of administrator skills, administrative theory). B.S., Ohio State, 1955 ; M.A., Kent State, 1960 ; Ph.D., Ohio State, 1968.
Richard H. Hersh, Ed.D., Professor of Education; Associate Dean, Division of Teacher Education (social studies, history, political science). B.A., 1964, M.S., 1965, Syracuse, 1966, Tufts; Ed.D., Boston, 1969.
Wesley C. Becker, Ph.D., Professor of Education ; Associate Dean, Division of Developmental Studies (culturally disadvantaged). B.S., Illinois, 1969 ; Ph.D., Utah, 1974.
Kenneth A. Erickson, Ed.D., Professor of Education (personnel administration, school surveys, superintendency). Director of Field Training and Service Bureau. B.S., Oregon, 1941 ; M.A., 1948, Ed.D., 1953, Washington State. Robert H. Schwarz, Ph.D., Professor of Education ; Director of the Center on Human Development (special education). B.S., Wisconsin, 1948; M.A.,

Columbia, 1949 ; Ph.D., American, 1966.

## Center on Human Development

## Research Faculty

Robert H. Schwarz, Ph.D., Professor of Education (special education).
Director of the Center on Human Development. B.S., Wisconsin, 1948 ; M.A., Columbia, 1949; Ph.D., Anerican, 1966.
G. Thomas Bellamy, Ph.D., Coordinator of Research, Center on Human Development. B.A., Davidson, 1968 ; M.A., Wisconsin, 1971 ; Ph.D., Oregon, 1975.

Diane D. Bricker, Ph.D., Professor of Education. B.A., Ohio State, 1959; M.S., Oregon, 1965 ; Ph.D., George Peabody, 1970.
Phillip Browening, Ph.D., Associate Professor of Education (special education). B.A., Howard Payne, 1962 ; M.A., Texas Technological, 1966 ; Ph.D., Wisconsin, 1969.
Andrew Byrne, Research Assistant; B.A., John Carrol University, 1970; M.S., Syracuse, 1974.

Danieta Chiesa, Ed.D., Reseach Associate. B.A., 1961, M.A., 1963, Louisiana Tech; Ed.D., George Peabody, 1974.
Dan Close, Research Associate; B.A., California Lutheran College, 1971; M.A., Idaho State, 1973 ; Ph.D., Oregon, 1977.
Anita Crosson, Research Assistant ; B.S., Oregon, 1969.

James E. Crosson, Ed.D., Associate Professor of Education (special education). Director, Regional Resource Center, A.A., Independence Junior College, 1953 ; B.S., 1959, M.S., 1960, Kansas State; Ed.D., Oregon, 1966.
Fred Crowell, Research Associate ; B.S., 1958, M.S., 1962, Washington ; Ph.D., Oregon, 1970.
Ann P. Curtis, Research Associate ; B.A., Maine, 1971 ; M.A., 1972, Ph.D., 1977, Ohio University.
Norma English, Research Assistant; B.A., Silliman University, 1955 ; M.S., Southern Illinois, 1960.
R. William English, Ph.D., Associate Director, Research and Training

Center. B.A., 1964, M.A., 1967, Southern Illinois; Ph.D., Wisconsin, 1968.

William Fink, Research Associate; B.A., California, 1973 ; M.S., 1974, Ph.D., 1977, Oregon.
Gilbert Foss, Ph.D., Associate Director of Training. B.A., 1964, M.S., 1971, Minnesota; Ph.D., Oregon, 1975. Anita Foxworth, Research Associate ; B.S., 1964, Ed.M., 1966, Ph.D., 1972, St. Louis University.
Gregoria Halley, Research Associate ; B.S., 1959, M.S., 1967, Southern Connecticut State College ; Ph.D., Oregon, 1974.
Andrew' S. Halpern, Ph.D., Professor of Education (special education). Director, Research and Training Center. B.A., Carleton College, 1961 ; M.A., Yale, 1963 ; Ph.D., Wisconsin, 1966.

Forest Hertlein, Research Associate; B.A., Central Washington State College, 1967 ; M.Ed., 1971, Ph.D., 1976, Utah State.
Hyman Hops, Ph.D., Research Associate. B.A., Sir George Williams
University, 1959; M.A., Toronto, 1962 ; Ph.D., Oregon, 1971.
Robert H. Horner, Research Associate, Ph.D., Oregon, 1978.
Dean P. Inman, Research Associate; B.A., Sacramento State College, 1970 ; M.S., Utah State, 1973 ; Ph.D., Oregon, 1976.

Larry Irvin, Ph.D., Research Associate in Research and Training Center in Mental Retardation. B.A., California, Davis, 1966; M.A., California State, 1970 ; Ph.D., Oregon, 1975.
Sally Johnson, M.A., Instructor in Education (special education). B.S., Northwestern, 1969 ; M.A., North Dakota, 1971.
Janet Kerans, Research Assistant ; B.A., Oregon, 1973.

Louise Knight, Research Assistant ; B.A., Trinity College, 1945 ; M.A., Oregon, 1973.
Janet Landman, Research Assistant; B.S., Purdue, 1971 ; M.S., St. Francis College, 1973.
Wendy Marmont, Research Assistant ; B.A., University of Denver, 1971; M.Ed., Central Washington State College, 1975.
Caroline Jean Moore, Research Assistant; B.A., 1971, M.A., Oregon, 1974.
Arden Munkres, Research Assistant; B.A., Western Washington, 1964 ; M.F.A., Oregon, 1971.

Gary Nave, Research Associate ; B.A., 1970, M.S., 1971, Oregon.

Judy Newman, Research Assistant; B.A., California State, Sonoma, 1972. Judson Oberle, Research Associate ; B.A., 1967, M.A., 1969, Ph.D., 1975, Syracuse University.
Kristi Olson, Research Assistant ; B.A., St. Olaf College, 1965 ; M.S.W., Wisconsin, 1968.
Marshall Peter, Research Assistant ; B.A., Mt. Angel University, 1972 ; M.S., Oregon, 1976.

Alan F. Reeder, Ed.D., Research Associate. B.S., 1962, M.S., 1968, Utah ; M.A., San Francisco State, 1969; Ed.D., Oregon, 1972.
Richard Schroeder, Research Assistant ; B.S., Oregon State, 1972 ; M.B.A., Oregon, 1973.
Thomas Schwartz, Research Assistant; B.A., Indiana, 1972 ; M.T.S., Harvard Divinity School, 1974.
Annabelle Street, Research Assistant ; B.S., 1965, M.S., Oregon, 1969.

Hill M. Walker, Ph.D., Professor of Education (special education) ; Director, CORBEH. B.A., Eastern Oregon College, 1962 ; M.A., 1964, Pli.D., 1967, Oregon.
Nancy Weissman, Research Assistant; B.A., State University of New York, Buffalo, 1972 ; M.S., M.S.S.W., Wisconsin, 1975.
Richard W. Zeller, M.A., Instructor in Education (special education). B.A., Willamette, 1967 ; M.A., California, Los Angeles, 1968.

The Center on Hunian Development was organized to provide a unified approach to research and the delivery of trained manpower and services by the following federally funded projects:
(1) Center at Oregon for Research in the Behavioral Education of the Handicapped (CORBEH) ; (2) Regional Resource Center; (3) Research and Training Center on Mental Retardation; (4) University Affiliated Facility; (5) Specialized Training Program.

The programs includes a diagnostic clinic that provides evaluations for children and young adults with unique medical-behavioral problems, classrooms for preschool, multiplehandicapped children, a special work program for severely retarded adults, field services such as seminars, educational consultation to schools and an ongoing research project designed to facilitate the educational programming of disturbed children in a public school setting. Although the staff of the Center is involved in training and research specific to the mandates of the projects, collaborative efforts have extended the impact of the total program. Skills and
techniques developed by the staff are disseminated widely, and school systems and agencies are encouraged to continue and extend prograns with local support.

## The E. C. Brown Foundation

John A. Bruce, Ph.D., Director. Adjunct Associate Professor. B.A., Wesleyan University, Connecticut, 1956; M.Div., General Theological Seminary, New York, 1959 ; Ph.D., Minnesota, 1972.

The E. C. Brown Foundation is a private foundation located in Portland with a special interest in the family, health, sex education, and related matters. The Foundation is particularly known for the production of educational films in these areas.

Reflecting its close association with the University of Oregon, the Foundation's administrator is the President of the University and the Deputy Administrator is the Dean of the College of Education ; the Director of the Foundation is an Adjunct Associate Professor in the College of Education's Center for Educational Policy and Management.

# Center for Educational Policy and Management 

Lloyd A. DuVall, Ph.D., Associate Dean and Director<br>Jane H. Arends, Ph.D., Associate Director

The Center for Educational Policy and Management performs and integrates the functions of research and development, dissemination and service to the field, and instruction. Inquiries about CEPM may be addressed to 1472 Kincaid, Eugene, Oregon, 97401. Telephone (503) 686-5173.

## Research and Development

Research and development is carried out through funded programs and activities to advance theory and practice in educational policy and management. Four major programs are described below.

## Effects of the School's Organization

 on Students. This program will develop theory and technology for changing the structures and cultures of public schools. Longitudinal research will study the effects of organizational arrangements on students, and discover what students learn as a result of their school's organizational functioning. Action research will be conducted to develop new and significant roles for students in managing their schools. Co-Directors : Richard A. Schmuck and Philip J. Runkel. Research Associate : Richard P. Francisco.Schools as Student Work Organizations. The program will develop a new perspective on schooling in which schools are conceptualized as providing work regimes for students which correspond to the "institutional myth" of schooling in America, socialize children for adult life in organizations, and structure the interactions possible for students and teachers. A sociological investigation will map the schoolwork regime of a particular district and a concurrent historical investigation will trace the development of high schools as surrogate work organizations between 1880-1920. Program Director : Kenneth E. Duckworth. Research Associates: John S. Packard and C. H. Edson.

Conflict Management in Educational Governance. Having completed investigations of the responsiveness of schools to their clientele, this program now studies decision-making that occurs under conditions of conflict.

Researchers compare school districts and city governments where legislative bodies are elected and which appoint a single chief executive-a superintendent or city manager. Co-Director: L. Harmon Zeigler and Harvey J. Tucker.

Synthesis on Sex Equity in Educacational Policy and Management. This program seeks to understand the multitude of interrelated issues that constitute the problem of sex equity in educational policy and management and to synthesize literature and data that may inform the issues. The prospectus for a monograph will be produced and issues deserving of consideration in the future will be identified. Co-directors: Jane $H$. Arends and Philip J. Runkel. Research Associates: Patricia A. Schmuck, W. W. Charters, Jr., Thomas Jovick, John Packard, Richard Schmuck, Kenneth E. Duckworth, L. Harmon Zeigler, Harvey Tucker, and Richard Francisco.

## Dissemination and Service

CEPM distributes many kinds of publications and Center faculty make many presentations to various audiences each year. In addition to those activities and conferences sponsored by the Center, three special units that concern themselves with dissemination and service are described below.

ERIC Clearinghouse on Educational Management. The ERIC (Educational Resources Information Center) Clearinghouse acquires and disseminates information in the form of newsletters, press releases, informational circulars, and lists of publications. The Clearinghouse indexes and abstracts materials on educational management and educational facilities for listing in two monthly publications, Research in Education and Current Index to Journals in Education. Other Clearinghouse publications include state-of-theknowledge papers, analyses and bibliographies, research reviews, monographs, and technical reports. Director: Philip K. Piele. Assistant Director: Stuart Smith.

Field Training and Service Bureau. The Bureau provides consultant and field services aimed at solving problems related to the administration, organization, financing, planning, and operation of educational programs as well as the evaluation of programs and educational facilities. Staff members provide professional growth opportunities for school districts, professional organizations and individuals through workshops, conferences, and training
programs; disseminate information on exemplary practices and new developments in education, and facilitate communication between the College of Education and the field. Director: Kenneth Erickson.

Oregon School Study Council. Financed by membet school districts, the Oregon School Study Council publishes monthly and special bulletins and quarterly reports on important and current educational developments; carries out requested research on special problems in education; arranges for conferences in which member districts discuss and solve pertinent problems; schedules visitation programs for member districts to exemplary educational programs or facilities, and lends special library and research materials to administrators. Executive Secretary : Kenneth Erickson.

## Instruction

The instructional programs include a master's program in Educational Policy and Management; doctoral programs in Higher Education, Educational Policy, and Educational Administration, and state-approved programs for basic and standard certification of principals and superintendents. The Instructional Coordinator (to be selected) assists faculty with program development and evaluation and manages all programs.

Master of Arts or Master of Science in Educational Policy and Management. The master's degree program provides a foundation in educational policy and management as well as an opportunity to pursue specialized study. Admission decisions are based on an evaluation of all undergraduate transcripts, work experiences, GRE score, a statement by the applicant of his or her academic and vocational goals, and two letters of recommendation.

The student must complete 45 credit hours in courses to include (1) 24 hours of pass-differentiated graduate courses, (2) 30 hours in CEPM, 9 of which must be at the 500 level, (3) 9 hours in one of the departments of the College of Arts and Sciences, and (4) five required courses. Also, the student must complete a final project on a topic relevant to educational policy and management that entails a paper and up to 15 credit hours of study.

Doctoral Programs in Higher Education, Educational Policy and Educational Administration. The Doctor of Education (D.Ed.) degree may be earned in Higher Education or

Educational Administration and the Doctor of Philosophy (Ph.D.,) degree may be earned in those two areas and in Educational Policy. Applicants to all doctoral programs are evaluated on the basis of: (1) four letters of recommendation, (2) undergraduate and graduate programs and grade point averages, (3) scores on the Miller's Analogies Test or the Graduate Record Exam, (4) samples of scholarly work (e.g., term papers, master's thesis), and (5) statements by the applicant of his or her career goals, academic interests, and employment history.

A student's program includes a set of courses, requirements for which vary according to degree sought (D.Ed. or Ph.D.) and field of study. Residency requirements of three consecutive terms of full-time study or two consecutive terms of full-time study, followed by a term of directed internship as an option only for D.Ed. students, must be fulfilled. In addition, a student must maintain a B grade average, take a comprehensive exam over the courses in the appropriate recommended core, and complete a dissertation. Information on required courses and the recommended core for each program may be obtained from the Center.

Basic and Standard Certification for Principals and Superintendents. By act of the Oregon Legislature, all persons employed as administrators in the Oregon public schools must hold an administrative certificate. A Basic Administrative Certificate (good for two years and renewable twice) is issued to those who have (1) a master's degree from an approved institution and (2) a recommendation from CEPM to the effect that the candidate has demonstrated competence or verified completion of required coursework. A Standard Certificate (good for five years) is issued to those who hold the Basic Administrative Certificate and have had three years of appropriate experience.

Applicants to certification programs are evaluated on the basis of: (1) transcripts of previous academic work, (2) three letters of recommendation, and (3) score on the Miller's Analogies Test or its equivalent. Information on admissions procedures and required courses may be obtained from the Center.


## Educational Administration, Higher Education, and Educational Policy

## Instructional Faculty

Max G. Abbott, Ph.D., Professor of Education (identification and development of administrator skills, administrative theory). B.S., 1949, M.S., 1951, Utah State ; Ph.D., Chicago, 1960.

Gerald K. Bogen, D.Ed., Associate Professor of Education (college student-personnel administration). B.A., Western Washington, 1959 ; M.S., 1961, D.Ed., 1963, Oregon.
C. A. Bowers, Ph.D., Professor of Education (philosophy of education). B.S., Portland State, 1958 ; Ph.D., California, Berkeley, 1962.
Robert L. Bowlin, D.Ed., Dean of Students, with rank of Professor; Associate Professor of Edlucation (college student-personnel administration). B.S., 1953, M.A., 1958,
California State Polytechnic ; D.Ed., Oregon, 1964.
Richard O. Carlson, Ed.D., Professor of Education (organizational change). B.S., 1951, M.S., 1955, Utah ; Ed.D., California, Berkeley, 1957.
Werrett W. Charters, Jr., Ph.D., Professor of Education (research on schools and school administration). B.A., DePauw, 1944 ; Ph.D., Michigan, 1952.

Thomas L. Dahle, Ph.D., Adjunct Professor of Education and Speech (adult education). B.S., 1938, M.S., 1949, Wisconsin ; Ph.D., Purdue, 1954. Lloyd DuV all, Plı.D., Associate Dean and Director, CEPM ; Professor of Education (identification and development of administrator skills, theory). B.S., Ohio State, 1955 ; M.A., Kent State, 1960 ; Ph.D., Ohio State, 1968. C. H. Edson, M.A., Assistant Professor of Education (history of education). B.A., California, Berkeley, 1960 ; M.A., Oregon, 1970.
Kenneth A. Erickson, Ed.D., Director, Field Training and Service Bureau; Professor of Education (personnel administration, school surveys, inservice education, superintendency). B.S., Oregon, 1941 ; M.A., 1948, Ed.D., 1953, Washington State.
Robert D. Gilberts, Ph.D., Dean of the College of Education ; Professor of Education (problems of urban schools, conflict management, general administration). B.S., Wisconsin State, 1950 ; M.S., 1955, Ph.D., 1961, Wisconsin.

Steren M. Goldschmidt, J.D., Associate Professor of Education (law and education, juvenile delinquency). B.A., Oregon, 1966 ; J.D., California, Berkeley, 1969 ; M.A., Oregon, 1972. N. Ray Haw'k, D.Ed., Vice-President for Administration and Finance ; Professor of Education (higher education). B.S., 1947, M.S., 1948, D.Ed., 1949, Oregon.
John E. Lallas, Ed.D., Executive Dean, Professor of Education (higher education). B.A., Washington, 1947 ; B.A., Western Washington, 1952 ; Ed.D., Stanford, 1956.
Robert H. Mattson, D.Ed., Professor of Education (educational administration and special education). B.S., Montana State, 1949 ; M.A., State University of Iowa, 1950; D.Ed., Oregon, 1959.

Henry Osibov, D.Ed., Assistant to the Provost for Faculty Personnel ; Associate Professor of Education (school finance, school law). B.A., Western Washington, 1939 ; M.Ed., 1950, D.Ed., 1961, Oregon.
Philip K. Piele, Ph.D., Director, ERIC Clearinghouse on Educational Management ; Associate Professor of Education (voting behavior, facilities, information systems, conflict management). B.A., Washington State, 1957 ; M.S., 1963, Ph.D., 1968, Oregon.

Ralph C. Rands, D.Ed., Associate Professor of Education (community college, personnel evaluation, communications). B.A., Linfield College, 1949; M.Ed., 1954, D.Ed., 1966, Oregon.
Patricia A. Schmuck, Ph.D., Assistant Professor of Education (educational administration, sex equity, group processes). B.A., 1960, M.A., 1964, Michigan; Ph.D., 1975, Oregon. Richard A. Schmuck, Ph.D., Professor of Education (social psychology, group processes, organizational change). B.A., 1958, M.A., 1959, Ph.D., 1962, Michigan.
John E. Suttle, Ed.D., Professor of Education (supervision, personnel). B.S., Texas, 1948 ; M.Ed., Colorado, 1952; Ed.D., Texas, 1960.
Harry F. Wolcott, Ph.D., Professor of Education, and of Anthropology (anthropology and education). B.S., California, 1951 ; M.A., San Francisco State, 1959 ; Ph.D., Stanford, 1964.

## Faculty Emeriti

Grace Graham, Ed.D., Professor Emerita of Education (social foundations). B.A., 1933, M.A., 1936, Southern Carolina; Ed.D., Stanford, 1952 ; at Oregon since 1954.

Arthur C. Hearn, Ed.D., Professor Emeritus of Education (secondary schools, principalship, student activities). A.B., 1934, M.A., 1937, Ed.D., 1949, Stanford; at Oregon since 1950. Clarence Hines, D.Ed., Professor Emeritus of Education (school buildings, general administration). B.A., Drury College, 1925 ; M.A., Missouri, 1929 ; D.Ed., Oregon, 1950 ; at Oregon since 1958-69, and since 1970.
Paul B. Jacobson, Ph.D., Professor and Dean Emeritus of Education (current trends, issues, problems in education). B.A., Luther, 1922 ; M.A., 1928, Ph.D., 1931, Iowa; at Oregon since 1947. Adolph A. Sandin, Ph.D., Professor Emeritus of Education (elementary education, curriculum, organization). B.A., Central Washington College of Education, 1933 ; M.A., Washington, 1938; Ph.D., Columbia, 1943; at Oregon since 1950.
Hugh B. Wood, Ed.D., Professor Emeritus of Education (comparative education, curriculum design). B.S., Toledo, 1931 ; M.A., Colorado, 1935 ; Ed.D., Columbia, 1937 ; at Oregon since 1939.

## Courses of Instruction

EdAd 405. Reading and Conference. Credit hours to be arranged.
EdAd 407. Seminar. (G) The following seminar topics are offered with credit hours as noted. Other topics and credits may be arranged.
Law and Schools. 3 credit hours. An introduction to the purposes of law, the legal system, and the legal method. Focus on legal basis, powers, and relationship of local school boards, and state and federal governments in education. Particular emphasis on limitations on the exercise of institutional power provideded by the First and Fourteenth Amendments to the United States Constitution. First Amendment issues to be considered include freedom of speech and religion; Fourteenth Amendment issues include due process and equal protection of the laws. Course is recommended for students interested in Teacher Rights and Student Rights courses. Staff.
Teacher Rights. 3 credit hours. The legal rights of secondary and elementary teachers as well as the rights of student teachers.
Focus on liability of teachers and other educational personnel for injuries to students ; issues related to the terms and conditions of teacher employment including : certification, contracts, tenure, and collective bargaining; and the teacher's constitutionally protected rights under the First and Fourteenth Amendments to the United States Constitution, including due process requirements related to contract termination and nonrenewal, maternity and paternity leaves, right to expression in the classroom and community, and right to a private life after school hours. Staff.
Student Rights. 3 credit hours. Rights of elementary and secondary students under State and Federal law, focus on legal issues related to the First, Fourth, and Fourteenth Amendment issues include a student's right
to an education, equal educational opportunity, due process requirements related to suspension and expulsion and the rights of married students and mothers. Fourth Amendment questions related to the privacy of the student's locker and person, and student records. First Amendment considerations include student expression, dress and appearance, publications, and demonstrations. The rights of minors in the juvenile justice system will be compared with rights of students at school. Staff. EdAd 501. Research. Credit hours to be arranged. No-grade course.
EdAd 503. Thesis. Credit hours to be arranged. No-grade course.
EdAd 505. Reading and Conference. Credit hours to be arranged.
EdAd 507. Seminar. The following graduate seminars are offered with credit hours as noted.
Internship. 1-6 credit hours. Relevant experiences in administration of schools or in educational research and development arranged on an individualized basis. Staff.
Practicum for Interns. 2 credit hours. Continuing assessment and discussion regarding internship experiences. Staff.
Foundations of Educational Research. 6 credit hours. A two-term sequence for students in educational administration covering the logic of hypothesis-testing research, including theory, research design, measurement, and data analysis. Students carry out a minor research project. Statistics is not a prerequisite. Instructor's consent required. Charters.
Simulation in Decision-Making. 3 credit
hours. Uses simulated situations for skill development in decision-making. Emphasizes adequate use of information, anticipating consequences, and accurate analysis of problems. Instructor's consent required. Abbott, DuVall.
Thesis. 2 credit hours. Staff.
Personnel Evaluation. 2 credit hours. Investigates various systems of personnel evaluation, the issues connected with evaluation systems such as criteria for participation and decision rules, the data and data analysis need for such systems, and methods of implementation. Mattson.
Communication Skills. 2 credit hours.
Laboratory course in the interaction of people, especially in small, task-oriented groups, through verbal and nonverbal signals, codes, messages, and networks. Staff.
EdAd 508. Workshop. Credit hours to be arranged.
EdAd 570. Human Resource Management. 3 credit hours. A laboratory course in management skills relating to management of time, building motivation, forming work groups, establishing trust, implementing change, and researching agreement. Staff.

## EdAd 571. Collective Bargaining in Edu-

 cation. 2 credit hours. Examines the procedures and techniques of collective bargaining in a public school setting. Considers history and theory of collective bargaining; analysis of Oregon's collective bargaining statutes; and specific collective bargaining issues (i.e., unit determination, scope, contract language, impasse resolution, and grievance procedures). Simulated bargaining sessions involve participants in the planning, communication, and strategies required in the bargaining process. Goldschmidt.EdAd 573. Business Management in Education. 3 credit hours. Application of systematic procedure to the problems of acquiring
fiscal resources of a school district and managing its expenditures. Abbott.
EdAd 574. Educational Program Research and Evaluation. 3 credit hours. Developing and conducting a comprehensive program of research and evaluation activities in a public school system at the district, building, and classroom levels. Mattson.
EdAd 576. School Buildings. 3 credit hours. A critical analysis and discussion of current trends in school facilities planning, evaluation, and development with special emphasis on school district alternatives to deficit or surplus space problems or both. Topics to be covered include sources of information ; community participation in planning ; enrollment forecasting techniques : extrapolation methods, structural flow methods, and Markov models ; evaluation of existing facilities: physical appraisal, program appraisal, and future use; alternatives to building: year-round schools, renovation and modernization, relocatables, and found space; alternative uses of surplus space; techniques for closing schools; energy conservation; maintenance and security. Piele.
EdAd 578, School Community Relations. 3 credit hours. Long and short-term social, economic, political, and technological forces affecting the relationship of schools to the community, community interest groups, their purposes, leaders, and school-related interests ; community influentials and the schools; citizen decision-making and the schools; the referenda: methods of assessing citizen attitudes toward the schools; improving school responsiveness to citizen expectations. Piele.
EdAd 579. Systems for Program Planning, Budgeting, and Evaluation. 2 credit hours. Developing and implementing systems for program planning. budgeting, and evaluation in public schools. Staff.
EdAd 580. School-Personnel Administration .3 credit hours. An investigation of consideration of the best principles and practices in school-personnel administration and determining its role in facilitating the educational process.
EdAd 581. Pupil Personnel Services and Administration. 3 credit hours. Obtaining, recording, and interpreting demographic data on pupil personnel ; developing and implementing needed pupil personnel policies; providing and coordinating specialized pupil services. Staff.
EdAd 583. Policy Development. 3 credit hours. Analysis of the social, economic, political, and technological forces that shape educational policy at the national, state, and local levels. Developing school district policies, including establishing goals and objectives for schools and school districts, setting priorities, and assessing the consequences of policy enactment. Abbott.
EdP 324. The School in American Life. 3 credit hours. Orientation to the purposes, organization, financing, and operation of the American school, and the relationship of these factors to modern education reform. Evaluation of education as a career. Staff. EdP 327. Social Foundations of Teaching. 3 credit hours. Study of the school as a social institution, acquainting prospective teachers with social science theory and research relating to education ; politics and control of education, the process of socialization, social and minority issues in education, and alternatives and strategies for educational change. Staff.
EdP 328. Social Foundations of Teaching. 3 credit hours. Study of the role of the school in the community and of the local community's influence upon school culture, practices,
and curriculum ; the Community School concept; community resources for teaching ; and pupils' out-of-school activities and learning. Staff.
EdP 407. Seminar. (G) Credit hours to be arranged.
EdP 440. History of Education. (G) 3 credit hours. An historical study of the role of education in Western society. The course is designed both to acquaint the student with significant educational literature and to provide an opportunity to examine basic ideas which have tended to give form and purpose to educational thought and practice in Western culture. Edson.
EdP 441. History of American Education. (G) 3 credit hours. An introduction to the major social, intellectual, and institutional trends in the history of American education; the evolution of formal systems of education as the response of a people to their traditions, to their experiences in a given environment, and to broad social movements ; appreciation of the different experiences of various ethnic groups in our society, and the processes by which educators translate their beliefs concerning these groups into educational policy and practice. Edson.
EdP 445. Modern Philosophy of Education. (G) 3 credit hours. Examination of the ideas of Sartre, Buber, and G. H. Mead as they relate to current educational issues ; the nature of freedom, identity and alienation as analyzed from a phenomenological perspective; education as a process of examining cultural assumptions; the relationship between local control of education and freedom of inquiry ; education and Berger's theory of the social construction of reality. Bowers.
EdP 491. Social Education. (G) 3 credit hours. Examines the effects of the interrelationships of education and other social institutions in society in an effort to understand and deal with cultural change, the variety of special demands upon the schools, and contemporary issues and problems. Staff. EdP 501. Research. Credit hours to be arranged. No-grade course.
EdP 503. Thesis. Credit hours to be arranged. No-grade course.
EdP 505. Reading and Conference. Credit hours to be arranged.
EdP 507. Seminar. The following graduate seminars are offered with credit hours as noted or to be arranged.
Educational Policy I. 4 credit hours. Will focus on the political, legal, economic, technological, and ideological forces from which educational policy arises, the process by which such forces eventuate in a formal expression of the policy. Existing, significant educational policies will be used as the means whereby such factors about educational policy will be pursued. Abbott.

## Existentialism and Education. 3 credit

 hours. Examination of existential writersNietzsche, Heidegger, Buber, Heschel, and Camus-as they relate to educational thought and practice. An examination of the existential nature of teaching and learning. Bowers.History of Childhood and the Family. 3-5 credit hours. Historical colloquium exploring the changing nature and social meaning of childhood and the family from the Middle Ages to the present : examination of conceptual models from anthropology, psychology, sociology, and economics ; the invention of childhood; childhood and family in Colonial America; political socialization in the 19th century; origins of delinquency; feminism, sex, and birth control ; youth culture and educational policy proposals. Edson.

Historiography of American Education. $3-5$ credit hours. Colloquium examining source and interpretations of American educational history : philosophies of history ; progressive history of Ellwood Patterson Cubberley ; revisionist or new-left educational histories of Katz, Spring, Greer, Bowles, and Lazerson. Edson.

## Ethnographic Method in Educational

Research. 3 credit hours. The ethnographic method as an approach to descriptive research in educational settings ; problems and applications of the approach analyzed through the examination of accounts written about fieldwork by a number of anthropologists and by the analysis of completed ethnographic accounts. Wolcott.
History of Higher Education. 3-5 credit hours. Historical survey of higher education focusing on the social, political, and intellectual origins of American colleges, universities, and community colleges : medieval universities, colonial colleges, denominational colleges, the emergence of the university, changing conceptions of higher learning ; the structure of higher learning ; the multiversity. Edson.

## Politics of Knowledge. 3 credit hours.

Bowers.
Ideology and Education. 3 credit hours. Bowers.
EdP 508. Workshop. Credit hours to be arranged. No-grade course.
EdP 542. Urbanization, the Pupil, and the School. 3 credit hours. A history of urban education analyzing bureaucratization, patterns of political control of schools, teachers' and students' perceptions of the system, some functions of mass schooling, and strategies for change today. Discussions of primary sources and contrasting interpretations will attempt to relate schools to changes in urban politics and socio-economic structure in specific American cities. Edson.
EdP 545. School and Society in the Recent Past. 3 credit hours. Examination of the issues that have arisen in education as a result of recent social, political, and intellectual developments. Analysis of the issues presented in the writings of Ortega, Marcuse, Ellul, Freud, and Skinner, among others, will be a major part of the course work. Prerequisite: EdP 445, or consent of instructor. Staff.

## EdP 571. Anthropology and Education.

 3 credit hours. Education viewed as cultural process. The anthropology of teaching : review of cultural anthropology for its relevance to educating ; analysis of formal education from an anthropological perspective; education in cross-cultural settings. The teaching of anthropology ; anthropology in the curriculum. Formal and informal modes of enculturation. Prerequisite : graduate standing in anthropology or classroom teaching experience. Wolcott.EdP 572. Anthropology and Education. 3 credit hours. Exploration in depth of some problem or issue central to the field of anthropology and education; topic announced in advance. Prerequisite : EdP 571 or Anth 415, or consent of instructor. Wolcott.
EdP 590. Economics of Education. 3 credit hours. Private and social benefits; taxation; state distribution formulas; allocation within districts; economics of higher education. Staff.
EdPM 515, 516. Educational Institutions. 3 credit hours each term. EdPM 515 : Structures, processes, and procedures which characterize the formal organization of educational institutions; approaches to organiza-
tional analysis, organizational legitimation, regulation, integration, adaptation. Abbott. EdPM 516: The social organization of educational institutions, emphasis on the impact of organizational needs and personnel characteristic on the social organization. Carlson. HiEd 405. Reading and Conference. Credit hours to be arranged.
HiEd 501. Research. Credit hours to be arranged. No-grade course.
HiEd 502. Supervised College Teaching. Credit hours to be arranged.
HiEd 503. Thesis. Credit hours to be arranged. No-grade course.
HiEd 505. Reading and Conference. Credit hours to be arranged.
HiEd 507. Seminar. The following graduate seminars are offered with credit hours as noted or to be arranged:
Current Issues in Higher Education. 1 credit hour. Staff.
Financing Higher Education. Credit hours to be arranged. Hawk.
HiEd 508. Workshop. Credit hours to be arranged. No-grade course.
HiEd 509. Practicum. Credit hours to be arranged. Bowlin.
HiEd 520. Adult Education. 3 credit hours fall. Survey of adult education. Purposes, programs, philosophy, methods, materials, agencies, organization. Instructor's consent required. Dahle.
HiEd 530. Higher Education in Developing Countries. 3 credit hours winter. Brief survey of higher education in selected developing countries; comparison with American higher education; relation to economic development, major problems. Staff.
HiEd 550. Administration of College
Student Services. 3 credit hours winter.
Problems of counseling, financial assistance,
housing, career planning and placement, student activities, student services and relationship to academic mission. Instructor's consent required. Bowlin.
HiEd 571. Administration of the Community College, 3 credit hours. An examination of the origin and functions of the community college movement with emphasis on the problems and issues in organization and administration.
HiEd 572. Programs in the Community College. 3 credit hours. A survey of the variety of programs offered in the community college and their relationship to other educational, professional, and vocational areas. Rands.
HiEd 590. Higher Education Survey. 3 credit hours. Survey of present status and trends. Impact of national goals ; Types of institutions ; governance; state and federal financing; mana gement information systems; innovation and change; higher education and the public. Lallas.
HiEd 591. Teacher Eduucation Survey. 3 credit hours. Purposes, needs, and objectives of teacher education; present facilities and types of organization; student selection procedures; staff; curriculum. Relationships of preservice undergraduate, preservice graduate, in-service campus, and in-service field training. Staff.
HiEd 592. Administration of Colleges and Universities. 3 credit hours. Institutional organization-case studies ; institutional objectives; academic organization for instruction, research and participation in governance ; changing student roles; public services; general administrative functions and activities. Lalias.
HiEd 597. Methods of College Teaching. 3 credit hours. Psychology of learning, methods and techniques of college teaching, preparation for teaching, evaluation of teaching. Staff.


## Division of <br> Developmental Studies

Wesley C. Becker, Ph.D., Associate Dean.

The Division of Developmental Studies resulted from a reorganization of the College of Education effective July, 1974. Instructional areas in the Division are Counseling, Educational Psychology and Speech Pathology and Audiology. The other units in the Division are DeBusk Center (a counseling, school psychology, and learning disabilities clinic), and the University Speech and Hearing Clinic. Division faculty and staff are housed at 1761 and 1791 Alder Street, in the DeBusk Center (College of Education), and in the Clinical Services Building annex.

The Division offers graduate degree programs (master's and doctoral) in the areas noted above. Detailed information regarding programs in each of the three instructional areas is provided below by area.

Prospective applicants to programs within the Division are urged to study the following information closely because application and admissions policies and procedures vary considerably among programs. The Division also provides undergraduate and graduate instruction to students who are not majors in programs within its organization.

## Counseling

## Faculty

Gordon A. Dudley, Ed.D., Area Coordinator, Associate Professor of Education (psychodynamic theory and procedures). B.A., Kalamazoo, 1956;
M.A., Colorado, 1959 ; Ed.D., Harvard, 1971.

Martin H. Acker, Ph.D., Professor of Education (human sexuality, corrections). B.A., Brooklyn, 1943 ; M.A., 1953, Pl.D., 1963, New York University.
James R. Booth, M.S., Senior Instructor in Education (community mental health and social services). B.S., Boston University, 1952; M.S., William and Mary, 1956.
Susan K. Gilmore, Ph.D., Associate Professor of Education; (counseling theory and procedures). B.A., Whitworth, 1956; M.S., 1962, Ph.D., 1966, Oregon.
William Kirtner, Ph.D., Associate Professor and Counselor, University Counseling Center (college counseling).
A.B., 1950, M.A., 1955, Pl.D., 1959, Chicago.
Gerald D. Kranzler, Ed.D., Professor of Education (rational emotive counseling). B.S., Janestown College, 1956 ; M.Ed., 1959, Ed.D., 1964, North Dakota.
John W. Loughary. Ph.D., Professor of Education (career development, learning systems development). B.S., Oregon, 1952 ; M.A., 1956, Ph.D., 1958, Iowa.
Raymond N. Lowe, Ed.D., Professor of Education (family and school counseling). B.S.Ed., Massachusetts State, Fitchburg, 1940 ; M.A., 1948, Ed.D., 1951, Northwestern.
Esther E. Mattheze's, Ed.D. ,Professor of Education (human potentiality, career development). B.S., Massachusetts State, 1940 ; M.Ed., 1943, Ed.D., 1960, Harvard.
Theresa M. Ripley, Pl.D., Assistant Professor of Education and Coordinator of Career Planning with rank of Associate Professor (group procedures, career development). B.S., Illinois State, 1966 ; M.S.Ed., Indiana, 1968 ; Ph.D., Oregon, 1971.
Ronald J. Rousseve, Ph.D., Professor of Education (developmental counseling, social-philosophic foundations, minorities). B.S., 1953, M.A., 1954, Xavier ; Ph.D., Notre Dame, 1958. Anita Runyan, Ply.D., Assistant Professor of Counseling (community mental health, psychology, field based education). Director, University Year for Action. B.S., Pacific Union College, 1956 ; M.S., 1968, Ph.D., 1972, Oregon ; at Oregon since 1972.
Andrew Thompson, Ph.D., Assistant Professor of Education and Counselor with rank of Associate Professor, University Counseling Center (cognitive behaviorism). B.A., 1956, M.A., 1960, Ph.D., 1963, Minnesota.
Saul Toobert, Ph.D., Associate Professor of Education; Acting Director with rank of Professor, University Counseling Center (group and individual counseling ). B.A., California, 1947 ; Ph.D., Oregon; 1965.

## Adjunct Faculty

Kenneth D. Hills, Ph.D., Adjunct
Professor of Education (community college counseling). B.A., Northwest Nazarene College, 1952 ; M.A., 1963, Ph.D., 1964, Wyoming.
A. Stanley Hultgren, Ph.D., Adjunct Visiting Assistant Professor (child guidance, counseling procedures). B.A., Oregon, 1964 ; M.A., Arizona State, 1969 ; Ph.D., Oregon, 1976.

The Counseling Area of the Division of Developmental Studies offers integrated programs of classroom, practicum, and field experience leading to graduate degrees at both the master's and doctoral levels and to school counselor certification.

The graduate programs offered by the Counseling Area are briefly described here. Supplementary information relating to more general University policies and procedures may be obtained from the Graduate Student Records Office of the College of Education and from the Graduate School section of this catalog.

## Master's Degree Programs

At the master's degree level, the Area offers a generic program of studies in counseling designed to prepare professional practitioners for work in a wide variety of settings: schools, vocational rehabilitation agencies, community mental health centers, employment service offices, community college counseling centers, juvenile corrections agencies, human resources development programs, pastoral counseling settings, and family counseling centers.
Progran Components: In order to assure the thorough preparation of the counselor, the Area provides learning experiences, via its own resources and those of the University at large, which cover the following required program components.
(1) Understanding of anthropological (cultural), psychological, and sociological foundations of human development and behavior.
(2) Knowledge of career development and occupational choice.
(3) Understanding and skills in measurement and appraisal.
(4) Understanding of counseling theories and procedures.
(5) Knowledge of research methodology and statistics.
(6) Knowledge of schools and community social agencies in which one plans to function.
(7) Awareness of the several aspects of counseling as a profession including philosophical foundations, ethical standards, professional practice, interprofessional relationships, and the like.
(8) Practitioner competence in observing human behavior ; interpreting human behavior; facilitating the consideration of alternative behavior ; and, facilitating behavioral change.

The program of studies leading to the master's degree in counseling normally
requires 60 credit hours of graduate work, and typically involves from four to six terms of formal study. Although each student is required to master a number of understandings, knowledges, awarenesses, skills, and competences, there is a high degree of flexibility as to how these program components will be mastered and competence demonstrated. The particular program of preparation most appropriate for a given student is designed by the individual student and adviser in light of the student's background and previous experience, present professional goals, and the program components. Up to 15 credit hours of acceptable graduate credit from other universities may be transferred to a degree program.

Degrees: Upon successful completion of an approved program of study, and a final comprehensive examination, the student will be granted a Master of Arts (M.A.), Master of Science (M.S.) , or Master of Education (M.Ed.) degree in counseling. For the M.A. degree, the candidate must demonstrate proficiency in one foreign language. For the M.Ed. degree, a candidate is required to have a valid teaching certificate and to have completed at least one year of successful classroom teaching. At the master's degree level, the development of a research project, field study, or thesis is optional.

Financial Aid: At the present time, grants-in-aid are virtually nonexistent within the counseling program. Financial assistance must be sought outside of the program.

Admissions Procedures: Students applying for admission to the master's program in counseling must provide scores from the aptitude section of the Graduate Record Examination.

Prospective applicants may request detailed information on admission policies and procedures from Counseling Area, Division of Developmental Studies, College of Education, University of Oregon, Eugene, Oregon 97403.

The Counseling Area's timetable for distributing and receiving application materials begins August 1, 1978. The closing date for receipt of completed applications for admission in September 1979 is February 1, 1979. (New students are not admitted during winter and spring terms.)

Only completed applications will be reviewed. Applicants must themselves gather all requested supporting papers and submit them along with their application forms as one package.

Selection criteria include (1) quality of previous academic performance, (2) quality of supporting references, (3) pattern of either previous work or life experiences, or both, (4) status relative to student body heterogeneity, (5) cogency of the expressed rationale for seeking admittance to the Counseling Area, and (6) an overall judgment as to the applicant's probably professional promise. Candidates will be notified, by mail only, of the disposition of their applications by March 15.
Master's Studies; Summer Sessions Only: To accommodate persons who want to pursue a master's degree program or school counselor certification, but whose employment schedule may prevent them from enrolling for course work during the regular academic year (e.g., teachers), the Counseling Area has established a "summers only" category of students. Such students typically return to the campus during successive summers until their programs of study are completed.

The closing date for receipt of completed applications for the "summers only" program is May 1. (Priority is given to working professionals in Oregon who are pursuing the up-dating of their credentials.)

The master's program in counseling has an active Affirmative Action program and encourages applications from women and minority group members.

## Doctoral Degree Programs

The program of study leading to a doctoral degree in Counseling Psychology is approved by the American Psychological Association and typically entails a minimum of four years of full-time effort beyond the bachelor degree. A full year of internship training is required, one half of which must be completed after resident course work. Students applying for admission to the counseling psychology program generally are expected to have a master's degree in counseling, clinical psychology, social work, or a related discipline, and to have had substantial professional experience related to the field of counseling. Doctoral degrees are granted in recognition of exceptional mastery of knowledge and skills in the field of counseling psychology.

Recent graduates with doctoral degrees from the Area are now employed in the following capacities: counselors in college and university counseling centers, directors of guidance in public school districts, counseling psychologists in state and veterans
hospitals, university level teachers and researchers, school psychologists, government and industrial research psychologists, consulting psychologists, program adninistrators, and counseling psychologists in private practice.
Degrees: The doctoral program in counseling psychology may lead to either the Doctor of Philosophy (Ph.D.) degree or the Doctor of Education (D.Ed.) degree. In addition to other requirements, the Ph.D. requires a dissertation with a high level of scholarship, and is intended for those with the ability and motivation to make a significant contribution to the field through teaching and scholarly research.

The D.Ed. in Counseling Psychology is an advanced professional degree for practitioners. It combines the rigor of scholarship in pertinent content areas with the acquisition of professional skills in assessment, diagnosis, treatment, evaluation and therapy, as well as teaching, supervising, consulting, agency design and organization, and administration. Thus, while the Ph.D. program within the Division emphasizes critical thinking and quality research contributing to the creation of knowledge, the D.Ed. program places equal emphasis upon critical thinking and professional practice. Further references to the doctoral program or doctoral degree requirements, or both, apply both to the Ph.D. and the D.Ed. degrees, unless otherwise specified.

Program Components: The doctoral program in counseling psychology is designed to insure that its graduates will be :
(1) Knowledgeable Human Behavior Specialists, i.e., psychologists who possess a general knowledge of human behavior, together with those special observational and informationprocessing skills which facilitate description, explanation, and prediction of the behavior of persons in transaction with their worlds.
(2) Competent Practitioners of Counseling Psychology, i.e., psychologists who have mastered procedures for facilitating the growth of individuals, groups and systems, e.g., career planning, interviewing, sensitivity group training, man-machine delivery of vocational information, family counseling, behavior modification, desensitization, role-playing, and social-action program development.
(3) Skillful Producers and Consumers of Human Behavior Research, i.e., psychologists who have developed the necessary attitudes and sufficient
competence to formulate useful, researchable questions, design and conduct systematic analyses, interpret and apply the results of their own and others' efforts to increase the general knowledge of human behavior and the knowledge of the means whereby it can be influenced.
(4) Active Professional Ethical Agents, i.e., psychologists who: (a) recognize that professional credentials by definition, include commitment to a particular view of human nature and a definition of the good life, as well as the acceptable means for achieving it ; (b) strive to make explicit, review, and revise such commitments; and (c) actively work with individuals, groups, and systems to realize those commitments.

Program Development: In accord with our present understanding of how individuals develop, the training program in counseling psychology demands of all students considerable responsibility and autonomy for designing the particular pattern of educational experiences which will constitute their individual doctoral program. General areas of expected competence have been defined and general requirements have been established. However, the specific manner in which an individual meets those requirements is determined by the student in consultation with an adviser and the Doctoral Program Committee of the Counseling Area.
Financial Aid: Financial assistance for doctoral students is very limited.
However most doctoral students needing financial assistance are able to secure part-time counseling related jobs in the University or the local community.

Admission Procedures: Application materials may be obtained from Counseling Area, Division of Developmental Studies, College of Education, Eugene, Oregon 97403. Deadline for receipt of completed application credentials is February 1. Notices of final disposition of applications are mailed by March 15 .
Selection Criteria: Applicants are evaluated on the basis of: (1) Graduate Record Examination Aptitude test scores, (2) academic record, (3) related work experience, (4) letters of recommendation, (5) statement of purpose, and (6) a sample of written work.
The doctoral program in counseling psychology has an active Affirmative Action program and encourages applications from women and minority group members.

## Undergraduate Courses

Coun 199. Special Studies. 1-3 credit hours. Career Alternatives. Designed for undergraduates making career decisions, and to increase the student's a wareness of: (1) self, including abilities, interests and values; (2) world of work and nonwork; (3) social and psychological characteristics of work environment ; (4) nonwork activities and the importance of work to life style ; and (5) skills for locating resources and implementing career plans. Ripley.
Coun 405. Reading and Conference. Credit hours to be arranged. Staff.

## Upper-Division Courses <br> Carrying Graduate Credit

Coun 406. Special Studies. (G) Credit hours to be arranged.
Coun 407. Seminar. (G) The following seminar topics are offered with the credit hours noted. Other topics and credits may be arranged with staff members.
Master's Proseminar. 1 credit hour.
Examination of critical issues in counseling. Booth.

## Marriage Counseling. 3 credit hours.

 Gilmore.
## Rational-Emotive Counseling. 3 credit

hours. Introduction to the theory of rationalemotive therapy (RET) and its application to counseling with normal children and adults. Kranzler.
Introduction to Career Development Over the Life Span. 3 credit hours. Basic terminology, concepts, and theory with application to selected life stage. Matthews.
Counseling and Sexuality. 3 credit hours. Considers the effective means of responding to and dealing with various aspects of sexuality in counseling. Objective is to help counselors learn to be more effective and comfortable dealing with sexuality concerns in professional relationships. Consent of instructor is required. Acker.
Moral and Ethical Issues in Counseling. 3 credit hours. Gilmore
Classroom Guidance Techniques. 3 credit hours. A problem-solving approach to child guidance. Seminar intended for classroom teachers and school counselors. Kranzler.
Principles of Developmental Counseling. 3 credit hours. Analysis of major dimensions of the nonclinical counseling process in a democratic society. Emphasis on understanding the psychological concepts, progression points, and philosophic-ethical commitments which undergird the professional helper's interactions with clients who are coping with problems ordinarily encountered during the course of human development. Open to upper-division and graduate students interested in the helping services. Rousseve.
Elementary School Guidance Observation. 1 credit hour. Restricted to prospective school counselors who plan to enroll in elementary school practica (P/NP only). Kranzler.
Secondary School Guidance Observation, 1 credit hour. Observation of guidance programs in operation in local secondary schools, with an opportunity for debriefing during on-campus linkage seminars. Restricted to prospective school counselors who expect to earn credit in secondary school guidance practica during winter and spring terms. (P/NP only). Rousseve.
Appraisal. 3 credit hours.

## Introduction to Measurement and Assess-

 ment in Counseling. DudleyThe four following seminars are open to UYA students only. Runyan, Coiner, Pacheco.
Systems Interventions. 3 credit hours.
Human Service Management. 3 credit hours.
Transitions in Human Services. 3 credit hours.

## Human Service Policies. 3 credit hours.

Coun 408. Workshop. (G) Credit hours to be arranged. Staff.
Personal Development. 2 credit hours.
(May also be taken as 508.) A personal development program based on self-empowerment concepts. Concerned with increasing awareness, purpose, learning concepts and skills, and identifying information useful for dealing with common problems of living, such as career change, marital discord, negative feeling states, and job dissatisfaction. Extensive out-of-class activities required. Loughary.
Coun 409. Practicum. (G) The following practica are offered with credit as noted. All practicum work is (1) graded either Pass or No-Pass only, (2) reserved for students admitted to the Counseling program, and (3) required consent of instructor. Other topics and credits may be arranged. Staff.
Counseling-DeBusk. Credit hours to be arranged. Includes supervised counseling at DeBusk Memorial Center and other facilities appropriate to student's plans. Booth.
Secondary School Guidance. Credit hours to be arranged. Supervised guidance and counseling experience in local secondary schools. Rousseve.
College Counseling. 3 credit hours. Open only to students in programs leading to specialization in college counseling. Observation, staffing of cases, counseling, case writing, testing. University Counseling Center, Kirtner.

## Rational-Emotive Therapy. 3 credit hours.

Supervised RET-oriented counseling practica. Prerequisite : Seminars in rationalemotive counseling and RET laboratory. Kranzler.
Career-Planning Counseling. 3-6 credit
hours. Supervised career-counseling experience with college-age students in Career Planning and Placement Office. Consecutive two-term commitment required. Ripley.
Elementary School Counseling. Credit hours to be arranged. Supervised counseling experience in local elementary schools. Kranzler.
Community College Counseling. Credit hours to be arranged. Supervised counseling experience at Lane Community College or other community colleges. Hills.
Field Placement. (G) Credit hours to be arranged. Supervised counseling experience in community agencies. Acker.
Adlerian Psychotherapy. (G) Credit hours to be arranged. Experiences afforded in applying Adlerian life style analyses to the psychotherapeutic process. Frequent staffing of cases required. Consent of instructor is required. Lowe.
Supervised Field Study. 1-6 credit hours.
Open to UYA students only. Runyan, Coiner, Pacheco.
Coun 410. Experimental Course. (G) Credit hours to be arranged.
Introduction to Career Planning. 1 credit
hour. Open only to students in counseling with a career/life planning major. An overview of concepts, skills, information, and issues relevant to career planning. Ripley.

## Group Procedures in Career Planning.

2 credit hours. Designed to train participants to organize and implement career development classes and workshops. Ripley.
Professional Issues in Career Planning. 2 credit hours. Designed to develop shortterm helping and assessment skills. Topics include short-term helping and assessment skills, design of short-term training programs, and professional concerns of career counselors. Ripley.
Coun 450. Introduction to Counseling. (G)
3 credit hours. Prepracticum exposure to counseling relationships; semi-structured communication exercises and development of personal facilitative skills; interaction seminar involving case staffings by faculty and others; observation of counseling and interaction response. Prerequisite to practica. Booth.
Coun 463. Dreikursian Principles of Child Guidance. (G) 3 credit hours. The discovery and treatment of emotionally and socially maladjusted children: the home, the school, and the community in relation to children's mental health. Opportunities for observing familycounseling techniques. Principles are based upon ideas contributed by Alfred Adler and Rudolf Dreikurs. Lowe.
Coun 485. Principles and Practices of Guidance Services. (G) 3 credit hours. A general overview of the guidance function in a free society; principles and procedures attendant to guidance and counseling services in American schools. Rousseve.
Coun 486. Counseling Procedures. (G) 3 credit hours. Strategies for accomplishing counseling purposes of choice, change, and confusion reduction. Demonstration/discussion of individual counseling by instructor. Gilmore.

## Coun 488. Educational and Vocational

 Guidance. (G) 3 credit hours. Designed to broaden theoretical understanding of career development theory and to encourage application of theory to the practice of vocational and educational guidance within diverse settings (schools, clinics, employment centers). Loughary.Coun 491. Group Counseling. (G) 3 credit hours. A semi-structured seminar designed to facilitate development of group-leadership skills. The major topics include : group process and group objectives, factors which facilitate and burden constructive interaction, assessment of continuing process in the groups and some interventions, group, and the larger social context. Acker.

## Graduate Courses

Coun 501. Research. Credit hours to be arranged. Pass/No-Pass only. Staff.
Coun 502. Supervised College Teaching. Credit hours to be arranged. Pass/No-Pass only. Staff.
Coun 503. Thesis. Credit hours to be arranged. No-grade course.
Coun 505. Reading and Conference. Credit hours to be arranged. Staff.
Coun 506. Special Studies. Credit hours to be arranged.
Coun 507. Seminar. The following seminar topics are offered with credits as noted. Other topics and credits may be arranged. Staff.
Supervision. 3 credit hours. For doctoral students serving as adjunct supervisors of counseling practica. Examination of theory and individual case materials with focus upon style, strategies, tactics, and skills essential
to effective supervision of the counseling process. Booth, Acker.

## Doctoral Proseminar. 3 credit hours.

Examination of critical issues in the profession and practice of Counseling Psychology. Dudley. P/NP only.
Psychodynamics of Counseling. 3 credit hours. Intensive examination of the dynamics of the individual counseling relationship designed to improve the integration of theory and practice, knowledge, and experience. Dudley.
Rational-Emotive Therapy Laboratory. 3 credit hours. RET role-playing and supervised application of RET techniques in educational and other group settings. Prerequisite : seminar in rational-emotive counseling (Coun 407). Kranzler.
Research in Counseling. 3 credit hours.
An overview of published models of research in the field with emphasis upon outcome, procedures and problems. Kranzler.
Research and Thesis. 1-3 credit hours. Provides opportunity to review basic problems and procedures of the master's thesis and doctoral dissertation project. Outcomes include idea papers and dissertation proposals. Meets one hour per week each term. Kranzler. P/NP only.
Adlerian Theory. 3 credit hours. An intensive consideration of Adler's Theory of Individual Psychology. Lowe.
Appraisal. 3 credit hours. Use of aptitude, ability, interest, and personality tests in counseling. Focuses upon the interpretation of widely used tests and the integration of test information with the counseling process. Prerequisite: Coun 407, Appraisal. Dudley. The Assessment Interview. 3 credit hours. Basic principles and procedures of interviewing with primary emphasis upon assessment of client psychodynamics and planning appropriate counseling goals and strategies. Prerequisite: Coun 507 Psychodynamics. Dudley. Laboratory Procedures in Counseling. 3 credit hours. Advanced course in group procedures. The focus is on techniques of group leadership, group dynamics, measurement of small groups, and design of laboratories for human relations training. Emphasis on learning by participating in group experience. Toobert.
Human Potentiality Theorists. 3 credit hours. An investigation of selected theories underlying human potentiality in human evolution. Comparison and contrast of theories of Bucke, Maslow, deChardin, and Graves. Matthews.
Career Development of Girls and Women. 3 credit hours. A life stage analysis of the career development of girls and women.
Eriksonian Theory and Career Development. 3 credit hours. Individualized study of the application of Erikson's work to career evolution in people's lives. Matthews.

## Biography and Career Development. 3

 credit hours. Individualized study of selected life-span biographies with a focus on career in those lives. Matthews.Career Development in Mid-Life. 3 credit hours. Intensive study of the challenges and problems of mid-life career choice or change. Matthews.
The Counselor and Social Change. 3 credit hours. Analysis of newly emerging attitudes, beliefs, and values in American society applied to the counselor as a person and as a professional helper. Rousseve.
Perspectives on Personal Congruence. 3
credit hours. Psychological-philosophic analysis of the elements which foster personal
integration and a coherent sense of self against a framework of social interdependence. Following an overview of several models of the healthy personality during the first phase of the course, class participants will offer selfdisclosure presentations highlighting their personal styles and patterns of life management. General class feedback will provide an informal measure of the participants' levels of perceived congruence. ( $\mathrm{P} / \mathrm{NP}$ only) Limited enrollment ; consent of instructor is required. Rousseve.
Values in Counseling. 3 credit hours. Systematic exploration of values as a dimension in the counseling process and as a component in the search for meaning during an age of moral conflict and social change. The analysis will proceed from the premise that because counselors are potential role models, they should become consciously engaged with the valuing process as a basis for enhanced professional effectiveness. A secular philosophic orientation will be featured during the instructor's presentations. Limited to students who are already knowledgeable about the basic principles of counseling. Consent of instructor is required. Rousseve.
Career Development and Culture. 3 credit hours. An examination of the impact of cultural variables on the design of career development-life planning programs. Consent of instructor is required. Loughary.

## Facilitating Personal Development. 3

 credit hours. Presentation of self-empowerment concepts and practice of skills for dealing with personal crises, change, dissatisfaction, and depowering aspects of one's environment. Limited to counseling majorsgeneral. Consent of instructor is required. Loughary.Leisure Counseling. 3 credit hours. Leisure examined as a major career dimension with generally unrealized potential for self-expression and meaningful activities. Major topics: leisure concepts, information resources, assessment skills, counseling procedures, and research findings. Loughary.
Coun 508. Workshop. Credit hours and topics to be arranged. All workshops are graded either Pass or No-Pass only.
Adlerian Life Style Analysis. 3 credit hours. An examination of the theoretical bases underlying the life style; a study of the life style; application of the life style analysis. Prerequisite: Coun 507 Sem : Adlerian Theory. Lowe.
Coun 509. Practicum. The following practica are offered with the credits as noted. All practicum work is (1) graded either Pass or No-Pass only, (2) reserved for students admitted to the Counseling program, and (3) requires instructor consent. Other topics and credits may be arranged. Staff.
Counseling-DeBusk. Credit hours to be arranged. Supervised counseling at DeBusk Memorial Center and other facilities appropriate to the student's plans. Prerequisite : Coun 409. The DeBusk Practicum. Booth, Dudley, Acker.
Elementary School Counseling, Credit hours to be arranged. Supervised counseling experience in local elementary schools. Kranzler.
Secondary School Guidance. Credit hours to be arranged. Supervised guidance and counseling experience in local secondary schools. Rousseve.
Community College Counseling. Credit hours to be arranged. Supervised counseling experience at Lane Community College or other community colleges. Hills.

College Counseling. $3-6$ credit hours. Same as Coun 409 except that the student is expected to work with less immediate supervision. Prerequisite: Practicum in College Counseling (Coun 409). Kirtner.
Field Placement. Credit hours to be arranged. Supervised counseling experience in community agencies. Acker.
Career Planning Counseling. 3-6 credit hours. Supervised career counseling experience with college-age students in Career Planning and Placement Office. Consecutive two-term commitment required. Ripley.
Adlerian Psychotherapy. Credit hours to be arranged. Continuation of experiences initiated at the 409 level. Students expected to carry cases on a relatively independent level Conferring with supervisors at a collegial level. Consent of instructor is required. Lowe.
Coun 510. Experimental Course. Credit hours to be arranged.
Coun 526. Counseling Theories. 3 credit hours. Survey, evaluation, and integration of philosophical and theoretical assumptions which underlie counseling procedures. Dudley.

## Educational Psychology

## Faculty

Henry F. Dizney, Ph.D.. Area Coordinator, Professor of Education (measurement and research, educational evaluation). B.S., Southeast Missouri State, 1954; M.Ed., Wayne State, 1955 ; Pl.D., Iowa, 1959.
Wesley C. Becker, Ph.D., Associate Dean and Professor of Education (culturally disadvantaged). B.S., Illinois, 1969 ; Ph.D., Utah, 1974.
John E. deJung, Ed.D., Professor of Education (measurement, evaluation and research, mental retardation).
B.A., Montana, 1951; M.A., 1954, Ed.D., 1957, Syracuse.
Lloyd L. Lovell, Ph.D., Professor of Education (human development, giftedness, philosophy of science, perception). B.A., Lawrence, 1947 ; M.S., Minnesota, 1951 ; Ph.D., Cornell, 1955.
Janet Moursund, Ph.D., Associate Professor of Education (learning, research design). B.A., Knox, 1958; M.S., 1961, Ph.D., 1963, Wisconsin. Arthur Mittman, Ph.D., Professor of Educatoin (measurement and research, psychometrics). B.A., 1947, M.S., 1950, Ph.D., 1958, Iowa.
Charlotte Peterson, M.A., Visiting Instructor of Education (school psychology). B.A., 1968, M.A., 1971, California State, Long Beach.
Richard J. Rankin, Ph.D., Professor of Education (psychometrics, learning and motivation, human development). B.A., 1953, M.A., 1954, Ph.D., 1957, California.
Richard A. Schmuck, Ph.D., Professor of Education; Research Associate, Center for Educational Policy and Management (social psychology, group processes, organization development). B.A., 1958, M.A., 1959, Ph.D., 1962, Michigan.
Herbert H. Severson, Ph.D., Assistant Professor of Education, Director of School Psychology Program (behavior modification, biofeedback, personality assessment). B.S., Wisconsin State, 1966 ; M.S., 1969, Ph.D., 1973, Wisconsin-Madison.

## Adjunct and Courtesy Faculty

Joyce Gall, Ph.D. (social psychology, instructional development, school management and organization). B.S., Illinois, 1963; Ph.D., California, Berkeley, 1970.

Meredith Gall, Ph.D., Associate Professor of Education (educational research and development, instructional design, teacher training and research).
A.B., Harvard, 1963 ; Pl.D., California, Berkeley.
Catherine M. Porter, Ph.D., Assistant Professor of Education (gerontology). B.S., Texas, 1962 ; M.A., Houston, 1966 ; Ph.D., Oregon, 1972.
Diane L. Reinhard, Pli.D., Assistant Professor of Education (research and evaluation methodology), Assistant Dean. B.S., 1965, M.S., 1969,
Wisconsin, Milwaukee; Ph.D., Ohio State, 1972.
Patricia A. Schmuck, Ph.D., Visiting Assistant Professor (group processes, educational evaluation). B.A., 1959, M.A., 1964, Michigan ; Pl.D., Oregon, 1975.

Frances G. Scott, Pl.D., Professor of Education; Director, University of Oregon Center for Gerontology ; Professor of Community Service and Public Affairs (gerontology, administration, research and adult development). B.A., 1953, M.A., 1954, Texas ; Ph.D., California at Los Angeles, 1960.

The Educational Psychology Area serves a dual role: (1) It provides instruction in the elements of learning, motivation, perception, and measurement as they apply to classroom situations for undergraduates preparing to teach, and service courses in these areas for graduate students training for any of the educational specialties, e.g., remedial education, early childhood education, counseling psychology, and special education. (2) It offers intensive programs at the graduate level for persons interested in (a) the discipline of educational psychology, (b) human development, (c) school psychology, and (d) measurement and research.

Graduate study in the four areas listed above is supported by a qualified faculty representing each of the specialties. Programs are designed for each student individually, to remedy initial weaknesses in the student's previous background and experience and at the same time provide a program of study compatible with future professional goals.

## Admission to Graduate Programs

Admission to all programs within Educational Psychology requires: (1) admission to the Graduate School at the University of Oregon and
(2) formal admission to Educational Psychology.

## Admission and Selection Criteria:

 Admission to a graduate program in Educational Psychology is competitive. At admission time the faculty consider and weigh : (1) GRE scores, (2) tran-scripts of undergraduate and graduate work, (3) references, (4) the student's own statement of intent, purpose, and reason for writing to study in an Educational Psychology program, and (5) relevant work experience (in education, psychology, research, etc.).

All Educational Psychology programs are interested in receiving application from minority group members.
Time Required to Complete a Program: Master's : one-two years (two years for school psychology, longer without full-time study). Doctoral: two years beyond a master's degree.
Closing Date: March 1 is the closing date for completed applications to Educational Psychology.
Financial Aid: Financial assistance for graduate students is very limited.
However, in the past, most students needing assistance have been able to secure part-time positions in the University or local community. Applications. Requests for further information on Educational Psychology programs and admission procedures and forms should be addressed to : Admissions Secretary, Educational Psychology, Division of Developmental Studies, College of Education, University of Oregon, Eugene, Oregon 97403.

Graduate Programs in Educational Psychology
General Educational Psychology:
Programs leading to the Master of Arts, Master of Science, Master of Education, Doctor of Philosophy, and Doctor of Education degrees are offered in general educational psychology. In general, the purpose of each of these programs is to produce graduates capable of functioning as college teachers and researchers in the areas of educational psychology. Each program varies in level and emphasis, but all are planned to provide a sound foundation in the content and methodology of the discipline. Human learning and behavior is stressed. Instructional support is found in many departments of the University, but especially in Curriculum and Instruction, Psychology, Anthropology, Sociology, and Special Education. The system of advising allows flexibility in each student's program in terms of individual needs, strengths and prior experience.
Human Development: Graduate programs at the master's and doctoral levels are offered within this area of Educational Psychology. Programs of study are interdisciplinary in nature and are designed to prepare the student
to teach, conduct research, and work with special groups and programs in the discipline. The graduate work is highly individual, taking advantage of the student's past experience and professional goals. Graduate studies conducted at other institutions often are directly applicable to work in the programs at this University. The early childhood education programs offer unique opportunities for the study of human development, as do the resources of many other divisions within the University. Academic study is combined with practical work in all phases of physical, cognitive, psychological, and social development in the context of the society.

All master's degrees require the presentation of a thesis. The M.A. degree requires demonstrated proficiency in a foreign language, the M.S. degree does not require a foreign language, and the M.Ed. degree requires attainment of a valid teaching certificate and a year of successful classroom teaching. A minimum of 45 credit hours beyond the baccalaureate degree, of which up to 15 may be transferred from other institutions, is required for the master's degree. The doctoral degrees are not degrees in course work. Completion of their requirements includes successful completion of a series of comprehensive examinations and the presentation of a dissertation or thesis. Though individual programs are flexible, a strong background in educational psychology, human development, and research skills is considered essential. All doctoral programs require a minimum of 45 credit hours of graduate study in the primary area of human development, and a minimum of 30 hours in a supporting area, which may be taken in any appropriate division of the University. Doctoral students frequently take work in the fields of psychology, sociology, counseling, special education, and teacher education as integral parts of their doctoral studies.

Admissions procedures and opportunities for financial support are described in the introductory section of this portion of the catalog, and in the general section on graduate studies.

Students on campus or visiting Eugene who want to discuss the possibility of pursuing graduate studies in this program should see Professor Lovell.

Measurement and Research: Graduate programs at the master's and doctoral levels are offered within this area of Educational Psychology.

This component of the area of Educational Pंsychology is concerned with the study of techniques that facilitate the work of the educator in assessing the extent to which new courses, new methods, and new learning experiences make a difference in the end product of the schools. Emphasis is placed upon systematic data gathering procedures, measurement, statistical methodology, and evaluation. Of special interest is the application of research design and statistical methods in measurement and the drawing of inferences about education and human development. Study is devoted to improvement of techniques and of new methods for carrying out these tasks. Opportunities are available to use computers as a facilitating device in these areas of study.

In its relationship to the College of Education the measurement and research component offers a curriculum for graduate study in quantitative methods of research at various levels of sophistication.

Increasing emphasis on educational research and evaluation, at all levels of education, requires persons who have training and skill in the areas serviced by this branch. Graduates of this discipline assume roles in departments of educational psychology at other colleges and universities. Others become members of research staffs in educational laboratories, state departments of education, or local school districts.

Students who want to pursue graduate study in this area are encouraged to acquire a broad base in the area of education because they must be conversant with the problems of all branches of the educational community. Of course, they will be expected to pursue formal study in statistics, measurement, experimental design, and evaluation. A background in either mathematics or aptitude for quantiative thinking, or both, is desirable. The course of study for a given student is designed to take into account the student's needs, interest, and previous training and experience.

Students on campus or visiting Eugene who want to discuss pursuing graduate studies in this program should see Professor Mittman.

## School Psychology: The major

 emphasis of the graduate programs in school psychology is the preparation of professionals who can work effectively in the diagnosis and remediation of children and adults with personal, social, and educational problems. Training in school psychology at the University of Oregon includes:(1) a 90-credit-hour course of study leading to a master's degree and (2) an individualized post-master's plan of study culminating in a doctorate.

The aim of professional preparation in the school psychology program at the University of Oregon (M.S. and Ph.D. levels) is to develop individuals who are thoroughly grounded in basic psychology and also are able to apply psychological principles to practical problems which arise in the classroom. Attention is directed toward the development of skills in evaluating the intellectual, emotional, social, and academic development of children ; planning and implementing remedial procedures; conducting case conferences with school personnel and professionals from other disciplines; carrying out either counseling or therapeutic intervention, or both, with children; and consulting with parents, teachers, and principals about schoolrelated problems. Students are exposed to a wide variety of psychological theories, philosophies, practices, and applied settings. Insofar as possible, the program of each student is individualized under broad objectives to permit each student to develop his or her own special strengths and interests.
Master of Science: The master's program is designed for those students who want to become practitioners by meeting the Oregon certification requirements for school psychologist and the certification requirements of most other states. Each student will be expected to have or to develop and demonstrate competence in each of four basic domains: (1) general psychology, (2) learning problems, (3) psychometrics, and (4) consultation. Certain courses basic to the aims of the program are required of everyone. However, flexible planning of each student's academic experiences is a part of the program. The emphasis of the program is on the demonstration of competence in the four basic domains. A student's program is planned individually with an adviser after a discussion of the student's background, experience, and future professional goals.
Doctor of Philosophy: The major goal of the doctoral program is the training of a psychologist who can work in the educational setting both as a change agent and as a researcher. Fundamental to the development of this training program is the model of the psychologist as a consultant to the total educational process. The doctoral program is an individualized, post-master's plan of study featuring a major in school psychology with a supporting area of
the student's choice. Students accepted at this level are expected to demonstrate competence in the four areas of the master's program. The doctoral student's program builds on the core areas and ultimately specializes in at least one of these four domains. An integral component of the Ph.D. work is the completion of a dissertation involving independent research.

Students on campus or visiting Eugene who want to discuss the possibility of pursuing graduate studies in this program should see Professor Severson.

## Undergraduate Courses and Seminars

The 300 -level sequence of courses or their equivalent are required for teacher certification in Oregon. Students wanting to discuss waivers and substitutions in any part of the sequence should consult with Professor Lovell.
EPsy 321. Human Development and Education. 2 credit hours. Examination and study of human development through conception, infancy, childhood, adolescence, and early adulthood; considerations of relationship between developmental processes and educational experience in the United States today. Offered every term. Lovell, Moursund.
EPsy 322. Human Learning and Education. 2 credit hours. Examination and study of human learning in children, adolescents, and adults. Consideration of learning theories of instruction and motivation, and their relevance to human learning in individual, group, and school situations. Prerequisite : EPsy 321, or an approved equivalent. Offered every term Dizney, Mittman, Rankin, Moursund.
EPsy 323. Psychology and Problems in Education. 2 credit hours. Study of role of psychology in a number of contemporary problems and issues in education. Knowledge of human learning and developmental processes will be related to particular current issues in education, e.g., the use of intelligence tests and testing programs in schools ; group processes in education, and student motivation. Prerequisite: EPsy 321 and 322 or approved equivalent, and practical teaching experience approved by department. Offered every term. Severson, Dizney, Moursund.
EPsy 405. Reading and Conference. Credit hours and topic arranged between individual student and professor.
EPsy 407. Seminar: Human Sexuality in Education. 3 credit hours. A course for inservice and preservice educators which examines the major topics in human sexuality with emphasis upon psychosexual development and its relationship to education. Lovell, Trepper.

## Upper-Division Courses Carrying Graduate Credit

EPsy 407. Seminar. (G) Credit hours to be arranged. The following seminars are offered for graduate credit and with credit hours as noted.
Educational and Psychological Tests and Cultural Minorities. 3 credit hours. An examination of some of the issues involved in the use of educational and psychological tests in the U.S.A. with special reference to their use with minority populations.

Developmental Psychology of the Child. 3 credit hours. Child, growth, development, and psychology with some special emphasis upon the relevance of knowledge in this area to those in applied professions. Lovell.

## Developmental Psychology of the Adoles-

 cent. 3 credit hours. An examination of adolescent growth and development and the psychology of adolescence. Emphasis upon educational and applied implications of growth and development.Developmental Psychology of the Adult and Middle Age. 3 credit hours. Developmental psychology of the adult and older person, growth and development beyond the middle twenties. Porter, Scott.
Tests for Teachers. 3 credit hours. A straightforward examination of how to construct good classroom tests and evaluation procedures. A consideration of standardized tests in education. Dizney.

## Piaget in Psychology and Education.

3 credit hours. An examination of the theory and works of Jean Piaget and his co-workers, with consideration given to their importance in educational theory and classroom practice as well as their contribution to learning and developmental theory. Lovell.
Developments in Biofeedback, Self-
Control, and Behavior Modification. 3 credit hours. An examination of recent research and application of these techniques with special emphasis to their relevance in educational and helping-profession situations. Severson.
Psychology of Aging. 3 credit hours. The psychology of aging and old age. Human development of the aged. Porter.
Human Development and Learning. 4 credit hours. Aims to teach principles underlying cognitive aspects of teaching technology. Open to DISTAR students only. Consent of instructor required. Becker.
EPsy 409. Practicum. (G) Credit hours to be arranged. The following practicum topics are offered for graduate credit and with credit hours as noted.
Practicum in School Psychology. 3-12 credit hours. For School Psychology Program graduate students only. Severson, Peterson.
Testing-WISC-R. 3 credit hours. Practicum in the use and scoring of the Wechsler Intelligence Scale for children (R). Consent of instructor required. EPsy 564 normally a prerequisite. Reservations may be signed for on waiting list in Division office. Rankin, Severson.
Testing-Stanford Binet. 3 credit hours. The use and scoring of the Stanford Binet Test. Consent of instructor required. EPsy 564 normally a prerequisite. Reservation may be signed for on waiting list in Division office. Severson, Rankin.
Special Tests. 3 credit hours. A practicum in the use and interpretation of the Wechsler Preschool Intelligence Scale, a selection of other pictorial tests, the Ravens Progressive Matrices, and the Leiter International. Prerequisite : EPsy 564 and EPsy 409G (WISC-R) or consent of instructor. Reservations may be signed for on waiting list in Division office.
Personality Assessment. 3 credit hours. Designed to acquaint student with both theory and practice in the use of personality assessment techniques. Students are expected to administer and interpret a variety of objective and projective tests. Prerequisite knowledge of personality theory is highly desirable. Severson.

Field Work in School Psychology. 3-12 credit hours. Students will work in a school, agency, or research facility, and conduct appropriate evaluation, consultation, or delivery of services deemed appropriate for that placement. Supervision will be shared between University supervisor and agency personnel. A wide diversity of placements are available for field work placement, with the emphasis upon being involved in worklike environments emphasizing the training of specialized skills.
Internship in School Psychology. 3-12 credit hours. Students will work full or parttime in a public school or agency under the direct supervision of a certified school psychologist. Primary responsibility for supervision lies with the school or agency personnel and this experience is designed to be a closely supervised in vivo experience in the role and function of the school psychologist. This course is required of all persons seeking certification in school psychology. Minimum requirement is 400 clock hours of supervised time within a one year period.
EPsy 424. Measurement in Education. (G) 3 credit hours. Use and interpretation of informal and standardized tests as supervisory and guidance instruments for the diagnosis, analysis, evaluation, and improvement of instruction in the elementary and secondary schools. Test planning, item writing, essay testing, administration and scoring, analysis of scores and grade assignment. The course includes simple statistics of test interpretation. Dizney, Mittman.
EPsy 439. The Gifted Child. (G) 3 credit hours. The psychology, education, and guidance of the mentally superior and the extraordinary gifted child. Lovell.

## Graduate Courses

EPsy 501. Research. Credit hours to be arranged. No-grade course.
EPsy 503. Thesis. Credit hours to be arranged. No-grade course.
EPsy 505. Reading and Conference. Credit hours to be arranged.
EPsy 507. Seminar. Credit hours to be arranged. The following topics are offered with credit hours as noted.
School Psychology Linkage I. 1 credit hour. Intended for both beginning and senior school psychology graduate students. Severson.

## School Psychology Linkage II. 1 credit

 hours.School Psychology Linkage III. 1 credit hour.
Statewide Assessment and High School Competence Programs. 3 credit hours. An examination of statewide assessment and high school competence programs with special reference to development in Oregon. Dizney.
Selected Topics in Measurement. 3 credit hours. For students with some basic back ground in measurement and statistics, topics of particular relevance to education and educational evaluation will be considered. Dizney.
Thesis. 1 credit hour. Intended for all graduate students in the College of Education who are in the planning stages of their theses and research. Constructive help on research design and treatment of data is offered. Lovell, Mittman, deJung.
Design and Analysis of Experiments I, II, III. 3 credit hours. Three-term sequence to be taken in order. The first two terms deal with the various types of experimental designs
employing analysis of variance techniques. The third term deals with topics in multivariable analysis including regression. analyses, multivariate analyses of variance, analysis of covariance, and discriminate analysis. Matrix algebra is introduced as required. Prerequisite: EPsy 515, 516, or consent of instructor. Mittman.
Analysis of Published Research. 3 credit hours. Introductory survey in which published research papers are used to illustrate the various types of designs that most frequently are employed in educational research. Students are asked to critique articles from the standpoint of statement of the problem and appropriateness of the procedure employed in terms of questions being asked. Prerequisite : EPsy 512 and 515 , or consent of instructor. Rankin.
Individual Differences in Learning. 3 credit hours. An examination of aptitude and treatment interactions in learning and a consideration of individual differences in educational research. Rankin.

## Data Collection and Interpretation for

 Program. 3 credit hours. Examines planning and purpose of data collection, logical considerations and safeguards for accuracy and relevance. Development of required scales or instruments. Some background in measurement required. deJung.Organizational Development Consultation. 3 credit hours. An examination of the theory and techniques of organization development with emphasis on their practical application through consultation in school settings. Severson.
Behavioral Education Consultant. 3 credit
hours. The course is designed to acquaint persons with the use of cognitive-behavioral change strategies and the delivery of these services via a consultation model. Prerequisite knowledge of the principles of behavior modification is required. Students will be expected to conduct behavioral consultation with school personnel as part of the course requirements.
Group Processes in Education. 3 credit hours. An examination of theories and research in group processes, and the relationship of this topic to education. Research and action ideas on group processes in the classroom, the school organization, and within the district. Schmuck.

## Personality and Aging. 3 credit hours.

Works of various personality theories are considered for their contributions to the field of either normal or pathological aging or both. Developmental, psychoanalytical, behavioristic, social psychological, and other theories are so developed or extended. Scott.
EPsy 508. Workshop. Credit hours to be arranged.
EPsy 509. Practicum. Credit hours to be arranged.
Human Aging. Ewing.
EPsy 512. Introduction to Research Procedures in Education. 3 credit hours. Designed for students at the master's level or those persons who intend to be consumers of research rather than engaged in research. This course, along with a published research course, should prepare an educator to be able to read research papers from a critical point of view. Prerequisites: EPsy 424, 515. Dizney.
EPsy $515,516,517$. Educational Statistics. 3 credit hours each term. A three-term sequence that serves as a foundation for empirical investigation. The first term deals with descriptive statistics, regression, and correlation, and an introduction to hypothesis testing. Second term topics include several of the
more commonly used distributions including some nonparametric statistics. The third term offers a more advanced treatment of the elements of statistics. Mittman.
EPsy 525. Theory and Technique of Educational Measurement. 3 credit hours. Basic concepts of measurement are studied in detail. Emphasis is given to the topics of item sampling, classical test theory, validity, reliability, units and norms, and item statistics. The application of the topics in the educational context serves as the frame of reference. Prerequisite : EPsy 424, 515, and 516 or consent of instructor. Mittman.
EPsy 529. Advanced Educational Psychology I. 4 credit hours. Learning. Review of theories and variables with emphasis on implications for teaching methodology and classroom management. Primarily for graduate students in Educational Psychology and other departments of the College of Education and those seeking administrator certification. Others admitted with consent of instructor. Rankin.
EPsy 530. Advanced Educational Psychology II. 4 credit hours. Motivation related to human learning and to education. Review of major theories and research, examination of possible applications. Normal prerequisite EPsy 529, or consent of instructor. Lovell, Moursund.
EPsy 531. Adyanced Educational Psychology III. 4 credit hours. The social psychology of education. Examination of theories and research in social psychology, perceptions, and group dynamics, with consideration of their educational application. Normal prerequisites EPsy 529,530 , or consent of instructor. Schmuck, Moursund. EPsy 549. Principles and Practices in School Psychology I. 3 credit hours. Intended mainly for graduate students in school psychology. The theory, role, and function of school psychology in its relation to learning and the school setting. Sever son. EPsy 564. Mental Tests. 4 credit hours. An investigation is pursued into the rationale underlying modern ability tests. Factorial and G factor models are described with the intent of building a conception of the nature of ability. Literature is reviewed showing how tests in general contribute to psycho-educational theory. Attention is paid to practical psychometric problems. Prerequisite : Consent of instructor. Rankin.

Speech Pathology and Audiology

## Faculty

Ned J. Christensen, Ph.D., Area Coordinator, Professor of Education (speech pathology and audiology). B.A., 1954, M.A., 1955, Brigham Young ; Pl.D., Pennsylvania State, 1959.

Daryl Anderson, Ph.D., Health Science Center, Adjunct Assistant Professor ; B.S., 1965, M.S., 1969, Portland State ; Ph.D., 1973, Washington.
Lloyd E. Augustine, Plı.D., Coordinator, Clinical Programs; Assistant Professor of Education (speech pathology, audiology ). B.S., 1963, M.S., 1964, Brigham Young ; Ph.D., 1972, Washington.
Myrtice E. Butler, Ph.D., Coordinator, Public School Programs; Assistant Professor of Education (speech pathology, audiology). B.S., 1961, M.A., 1970, Ph.D., 1972, Colorado.
Ralph Coleman, Ph.D., Health Science Center, Adjunct Associate Processor : B.S., 1954, Oregon State ; M.S., 1960 , Oregon; Ph.D., 1963, Northwestern. Loyal D. Ediger, Ph.D., Audiological Services, Eugene Speech and Hearing Center, Adjunct Assistant Professor. B.A., 1963, Tabor College ; M.S., 1966, Ph.D., 1969, Utah.
Stephen A. Fausti, Ph.D., Chief Audiologist, Portland V.A. Hospital, Adjunct Assistant Professor. B.A., 1965, Washington State ; M.A., 1966, San Francisco State ; Ph.D., 1971, Washington.
Robert C. Marshall, Ph.D., Chief Speech Pathologist, Portland V.A. Hospital, Adjunct Assistant Professor. B.A., 1961, California, Santa Barbara ; M.S., 1965, Oregon ; Ph.D., 1969, Oklahoma.

## Undergraduate Studies

The instructional area of Speech Pathology and Audiology offers B.S. and B.A. degrees.
Objectives of the Program: The objectives of the program are: (1) to provide stuclents with a knowledge of the scientific aspects of speech and hearing as related to speech and language-normal and disordered; (2) to provide basic training concerning symptoms, diagnosis, and treatment of the various types of communication disorders in children and adults ; (3) to provide, along with study courses, the opportunity for extensive and varied supervised clinical practica in oncampus and off-campus facilities; (4) to give the student an understand-
ing of linguistic function as a form of human behavior ; (5) to relate study and practice in communication handicaps to the study of other areas of handicaps; (6) to provide as a foundation a strong undergraduate training program in order that the student may eventually qualify professionally as a speech pathologist.

Undergraduate work in Speech Pathology and Audiology is not intended as a terminal training program even though the student receives the Bachelor of Science or Bachelor of Arts degree. To assure accuracy and avoid misdirection, it is strongly suggested that the student be certain that the initial adviser be assigned from the Speech Pathology and Audiology faculty.
General Requirements for the Baccalaureate Degree: The student may work toward either the B.A. or the B.S. degree. The B.A. requires a total of 36 credit hours in courses classified as Language and Literature ; the B.S. degree requires a total of 36 credit hours of courses classified as Social Science or a total of 36 credit hours classified as Science. (Social Science and Science cannot be combined in order to satisfy this requirement for the B.S. degree.) In either case, the 36 credit hours are not in addition to the group requirements, but may be included in the total cumulative count of 186 credit hours.

Since Speech Pathology and Audiology is in the College of Education, the group requirements are those given for professional schools : three courses of at least 3 credit hours each in Arts and Letters, for a minimum total of 9 credit hours; three courses of at least 3 credit hours each in Social Science, for a minimum total of 9 credit hours; three courses of at least 3 credit hours each in Science, for a minimum total of 9 credit hours; and three courses of at least 3 credit hours each in any of the groups; none of the foregoing courses need be a sequence. The following is a summary of the minimum group requirements, totaling 36 credit hours, for the College of Education: Group I, Arts and Letters, 9 credit hours; Group II, Social Science, 9 credit hours; Group III, Science, 9 credit hours; electives from Groups I, II, III, 9 credit hours.
Area Requirements: In addition to the general bachelor degree requirements of the University such as Writing, Health, Physical Education, and the Group Requirements, the following minimum requirements are specified for students majoring in Speech Pathology and Audiology.

Major
Courses Hours Prerequisites
SPA 370
Phonetics
SPA 371
Speech
Science I
SPA $472 \quad 3 \quad$ SPA 370,371
Speech
Science II
SPA $481 \quad 3 \quad$ SPA 370, 371
Speech
Pathology I
SPA 482
Speech
Pathology II
SPA 483
Speech
Pathology III
SPA 487
Fundamentals of Audiology
SPA 488
Audiological
Assessment
SPA 489
Audiological
Rehabilitation
SPA 473
Lip-Reading
SPA 474
Speech \&
Hearing
Methods in
Schools
SPA 409
Clinical
Practicum
Total, 42 credit hours.
Upper-Division Credit: The student must have 18 credit hours in upperdivision courses outside of Speech Pathology and Audiology which are substantially related to or complementary to the major program. These may be selected from such areas as special education, psychology, linguistics, or anthropology. The 18 upper-division credit hours need not be from any one department or field.

State Certification in Speech Therapy: The following are additional requirements for endorsement in the public schools of Oregon. None of these are required for the bachelor degree in Speech Pathology and Audiology, but without them one cannot work in the public schools or in any agency where state certification is required: Teaching Strategies (CI 314) 2 credit hours; Teaching Reading and Writing in the Secondary School (CI 469) 3 credit hours; Human Development and Learning (EPsy 321, 322, 323 or the
equivalent), for 6 credit hours; one course from among CI 407 Problems of Minorities, EdP 327 Social Foundations of Education, EdP 441 History of American Education EdP 445 Modern Philosophy of Education; Secondary Media (CI 436) 2 credit hours. Although not required for the basic certificate, it is suggested that Exceptional Child (SpEd 407) 3 credits be taken in preparation for the standard endorsement.

Registration in SPA 409 Practicum in the Schools must be approved by the staff, and applied for in the College of Education. Prerequisites are SPA 370, 371, 481, 482, 483, 474, 487, 488, 489, and 2 terms of SPA 409. It consists of one full term of supervised speech therapy in an assigned school.

Most undergraduate students plan their programs in order to qualify for Oregon State Basic Endorsement upon graduation. At the present time, the Basic Endorsement is granted for a three-year period. It can be renewed for another three-year period if the holder of the Basic Endorsement has earned at least 24 credit hours of graduate work which the Speech Pathology and Audiology Area at the University of Oregon will accept as applicable toward a planned fifth-year of training in Speech Pathology and Audiology. If at all possible, the student should plan to enter graduate school immediately after completing undergraduate training, and complete the fifth year, possibly with a master's degree. Endorsement requirements in Oregon, as well as in other states, are under constant review and may be changed from time to time.

In order to receive Oregon State Basic Endorsement to work with the speech-handicapped, the student must complete all requirements for the SPA major, must complete the requirements for the Basic Certificate as specified by the Oregon Teacher Standards and Practices Commission, and must be recommended by the institution.
Grade Options: All courses for which any student received graduate credit are graded (A, B, C, D, or No-Pass) except SPA 501, 503, 509 which must be taken pass/no-pass. All students majoring in Speech Pathology and Audiology must take all SPA courses, except SPA 409, on a graded basis. SPA 409 must be taken pass/no-pass.
Personal Qualifications: Students without adequate speech ability may not major in SPA unless there is good reason to expect that they can achieve acceptable speech before attempting to engage in the required practicum
courses. In general, the student must have the same capacity for selfadjustment and emotional stability for admission to the practicum courses that would be required in professional employment. Supervised practicum involves both training for the student and service to the cases; and before students may be admitted to the practicum they must have demonstrated that they are responsible, mature, and wellorganized persons.
Admission as an Official Undergraduate Major: Students intending to major in Speech Pathology and Audiology will be accepted only as premajors until they are accepted into SPA 409; they then will be officially recognized as majors. The faculty may wish to interview the student before consent to enroll in practicum is given.

Those who are not accepted as majors may take basic courses as electives but may not enroll in any practicum course or in courses for which practicum is a prerequisite.

In the event that enrollment in practicum must be limited for any term, students with the best course preparation will be given priority. Those with lesser preparation may have to delay their beginning practicum work.

Graduate Studies
Master's Degree in Speech Pathology-Audiology
Master's-degree programs in Speech Pathology and Audiology may be either Master of Arts, Master of Science, or Master of Education programs. The Master of Arts requires the equivalent of two years of a foreign language. The Master of Education requires that the candidate hold a valid teaching certificate with one year of successful classroom teaching. A planned program leading to completion of the master's degree must be filed in the Graduate Student Records Office, College of Education, and in Speech Pathology and Audiology. It is recommended that this be done before completion of 24 hours of the planned program.

Master's-degree candidates intending to complete State of Oregon public school endorsement requirements should consult Ned Jay Christensen.

The procedures outlined below are designed to provide qualified students an opportunity to pursue their programs in an orderly and professional manner. The necessity to follow these procedures should not deter otherwise uniquely qualified applicants, whose background may not meet state mini-
mum standards, from seeking exceptions.
(a) Filing Application: Students interested in pursuing one of the master's-degree progranns in Speech Pathology and Audiology must submit a completed copy of the Application for Graduate Admission. The green copy of the application, accompanied by one official copy of all previous college or university transcripts, and a $\$ 10.00$ filing fee must be submitted to the Director of Admissions, University of Oregon. The remaining copies of the application and two copies of all college and university transcripts must be submitted to Speech Pathology and Audiology, Clinical Services Building, University of Oregon. Additional materials to be filed only with the Area include at least three recommendations and the completed Personnel Record form. The recommendations may be obtained from appropriate professional sources ; the Personnel Record form is completed by the applicant. Recommendations from faculty members should be included, if possible. All the necessary forms are available from the Speech Pathology and Audiology office.
(b) Obtaining Conditional Admission: To be considered for conditional admission, a prospective student's dossier must be completed and on file in the Area office according to the following schedule: Summer Session, April 1; Fall Term, March 1; Winter Term, November 1; Spring Term, February 1.
The general variables considered for conditional admission, include: (1) past academic record (normally undergraduate GPA of 2.75 or above, or completion of 12 hours of successful (3.00) graduate work is expected) ; (2) prior professional experience; and (3) professional and personal recommendations. Subsequent to each of the filing deadlines, applications will be evaluated. At this time an applicant either will receive conditional admission (Class 3) or be denied admission. It is important to note that no master'sdegree applicant will receive full graduate admission (Class 8) upon original application for study. Each student will receive notification of committee action. Upon receiving conditional admission, a program adviser will be made available to assist the student with initial planning and the securing of a permanent adviser. The adviser will assist in professional decisions regarding general foundation courses, specific program planning, equivalency of courses taken under differing titles, as well as substitutions
and electives. The primary responsibility of securing a permanent adviser, developing, filing, and fulfilling a program remains with the student.
(c) Full Graduate Admission: After gaining conditional admission, it is assumed the student will work with an adviser in developing and filing a program of studies.

Upon successful completion of 12 credit hours, and prior to completing 36 credit hours, of a planned program, the student must request change from conditional to full graduate admission. Except in unusual circumstances, the Admission Committee will award full graduate admission if the student has an adviser, an approved program filed with the Graduate Student Records Office and with Speech Pathology and Audiology, and has successfully completed 12 credit hours of graded, graduate study on the campus of the University of Oregon.

## Minimum Requirements for Master's-Degree Programs

(1) Total Credit: A planned program having a minimum of 51 hours is required for Speech Pathology and Audiology majors. At least 12 of these 51 hours must be in other areas of study of the handicapped or in courses outside the area which are relevant to the program. All work applicable to a progran of studies must be concluded within seven years. Twenty-four credit hours of study on campus must be graded. A minimum of nine credit hours must be 500 -level courses. A minimum cumulative GPA of 3.00 is required for graduation. A graduate thesis may or may not be required, depending upon staff and student considerations.
(2) Transfer: Not more than 15 credit hours of graduate work taken elsewhere may be applied to a degree program. Study completed through the Division of Continuing Education is considered transfer work. Correspondence study is not applicable to a master's degree.
(3) Residence: Thirty credit hours of graduate work are required to be completed in residence on campus. If less than 12 credit hours are transferred, three terms must be on campus ; if 12-13 hours are transferred, two terms must be completed in residence on campus.
(4) Continuous Enrollment: A graduate student who has been admitted for work toward a graduate degree is required to enroll in the University each term during the regular academic year from the time of first enrollment until the completion of all degree requirements, including the awarding of the degree. In any term in which
students are using University services and facilities, they must enroll in a minimum of three credit hours of course work. Ordinarily, this work will be done in residence, but students may register by proxy for course work when, for example, they are living elsewhere while writing a thesis and sending chapters of it to an adviser for criticism.

A student may register for on-leave status when not using University facilities or placing any demands upon the faculty ; there are no fees for onleave status. Leave is granted for a predetermined period of time, usually not to exceed one calendar year. An exception is made for students who are able to pursue their master's-degree work only in the summer term; these students must apply for leave for the ensuing school year. They may request extensions of leave up to, but not beyond, the seven-year limitation on credit earned toward a master's degree.

Failure to maintain continuous enrollment is considered evidence that the student has withdrawn from the University. Students wanting to resume study must formally apply for readmission, and must satisfy the requirements for admission in effect at the time of reapplication.
(5) Evaluation of Master's Candidates: When the student has completed 12 credit hours, there will be a staff and indiivdual student oral review of the student's status. If conditions are acceptable, the student will be advanced to full graduate admission (Class 8).

Reward: Acceptable performance on a project at the completion of the program is required. This project may be a written comprehensive examination, a research project, a clinical project, or a thesis. An oral examination is conducted as part of whichever project the student and adviser mutually select.
(6) Application for Degree: An Application for Degree card must be secured from and be filed with the Registrar within the first three weeks of the term in which the candidate expects to receive the degree.
(7) Reviez and Appeal Procedure: The status of a student may be reviewed at any time in response to request by the student or by a faculty member. Requests should be directed to the Area Coordinator. A written brief describing the particulars of the matter to be reviewed must be included with the request.

Upon receipt of a request for review and a brief, the committee will review the brief and advise regarding need for additional information, if necessary.

Additional information may in some instances require verbal presentation before the committee.
Clinical Practicum Facilities: Opportunity for supervised clinical experience is provided for graduate and undergraduate students in the following facilities:
(1) The University Speech and Hearing Center is housed in the multimillion dollar Clinical Services Building on campus. Children and adults are accepted for evaluation, consultation, and treatment on a scheduled basis. Practicum students are assigned a variety of cases for individual therapy. They also may participate in diagnostic sessions available at least three times each week, hearing screening programs, and hearing-aid evaluations.
(2) The Eugene Hearing and Speech Center is a well-equipped community facility.
(3) The Pearl Buck Center for Mentally Retarded is a private facility in which selected, trainable mentally retarded children are given intensive language and speech programs in relation to their total program of education.
(4) The Children's Hospital School is an Easter Seal facility for neurologically impaired and, in many cases, nonambulatory children. Opportunities here are mostly related to speech therapy with cerebral-palsy children and intensive language programs.
(5) The Crippled Children's Division is the Eugene campus agency of the School of Medicine, University of Oregon Health Sciences Center, Portland. The Developmental Delay Clinic is a multidisciplinary diagnostic clinic which evaluates and staffs children on a monthly basis. From ten to fifteen children are evaluated and staffed each month.
The Crippled Children's Division Cleft Palate Clinic is a multidisciplinary diagnostic clinic for children with oral-facial abnormalities. Students are permitted to participate on an observational basis, and may at times assist in diagnostic evaluation and staffing.
(6) A cooperative arrangement with the local school districts enables undergraduates and graduate students to do practicum work in public schools. The school population is approximately 35,000 students. At the present time, public school practicum experience is limited somewhat by availability of practicum openings in the schools.
(7) The Portland Veterans Administration Hospital in Portland, Oregon, offers a limited number of internships to qualified graduate students.
(8) The Child Development and Research Center at the School of Medicine, University of Oregon Health Sciences Center, Portland, offers practicum experience in selected cases.
(9) Other off-campus facilities are used, such as selected parochial schools, where practicum students are given the opportunities of designing school programs and performing the screening, follow-up, consultation, and other activities related to the establishment of school speech-therapy programs. Also, there are at times opportunities to participate on a limited basis in such programs as Head Start, Child-Care Centers, preschool kindergarten programs, and other specific programs. ASHA Accreditation: The Area offers all the necessary courses required by students who want to qualify for the American Speech and Hearing Association Certificate of Clinical Competence in Speech Pathology andLor Audiology. The Area is in the process of applying for full ETB accreditation.

## Doctoral Programs

The primary mission of the Speech Pathology and Audiology Area at the University of Oregon is the improvement of educational services delivered to the handicapped. As part of its attempt to fulfill this mission, the Area prepares scholars who are capable of assuming positions of leadership in college and university programs in speech pathology and audiology, and federal, state, and local education agency programs for persons with communication handicaps. The preparation may lead to either the Doctor of Philosophy degree or the Doctor of Education degree.

Doctoral degrees are awarded in recognition of the attainment of advanced knowledge, scholarship, and practical competence in special fields. The responsibility of the Area, and of individual faculty members, is generally that of selecting students, evaluating their progress through the program, and regulating the use of learning resources.

The most important instructional resource is the Area faculty. Faculty is selected on the basis of individual competence in applying knowledge from a wide variety of disciplines to the practice of speech pathology and audiology, and on technical competence in special areas. Area organization is maintained not on the basis of definitive, disciplinary orientations, but to facilitate the integration of knowledge and skills from a variety of disciplines.

Selection of students is based on
formal application which provides information on a number of variables. No single variable, whether a strength or weakness, is a sole determinant for admission. Decisions to accept or reject are made after a full review and discussion of all available information.

## Application for Admission: Students

 interested in pursuing a doctoral program in Speech Pathology and Audiology must submit to the Director of Admissions, University of Oregon, one copy of the Application for Graduate Admission, one official copy of all previous college or university transcripts, and a $\$ 10.00$ application fee. In addition, the applicant must also file with Speech Pathology and Audiology:(a) All remaining copies of the Application for Graduate Admission. (b) One official transcript of all college work taken prior to application for admission.
(c) A brief description of background experience, including unrelated positions and those directly related to special education.
(d) A minimum of three and a maximum of five letters of recommendation, including a letter from both the last academic adviser and the last, or current, employer.
(e) The applicant's Miller Analogies Test and Graduate Record Examination (verbal and quantitative) scores.
(f) A statement by the applicant relative to professional objectives (i.e., why the advanced degree is wanted ; career plans upon completion of the doctorate).
(g) Any material (e.g., master's thesis, field project, published articles, etc.) that demonstrates the applicant's contribution to education and writing ability.
(h) A statement concerning goals for personal growth and development.
(i) The Personnel Record-Application for Admission to Graduate Programs in Speech Pathology and Audiology.
Conditional Admission: To be considered for conditional admission, a prospective student's dossier must be completed and on file. It is the student's responsibility to ensure that the dossier is complete according to the following schedule:
(a) Summer Session Admission, February 1; Fall Term Admission, March 1; Winter Term Admission, October 1; Spring Term Admission, January 1. Mid-year admissions are limited to openings which occur when a student leaves the program and is no longer considered a doctoral candidate.
(b) Applications will be evaluated by a doctoral admissions committee as openings become available. An applicant may receive conditional admission (Class 4), may be denied admission, or may be asked for further information. It is important to note that no doctoral program applicant will receive full graduate admission (Class 9) upon original application for study. Each student will receive notification of committee action.
(c) The general factors considered by the Area's admissions committee, for conditional admission, include : (1) past academic record including both undergraduate and graduate course work (normally, the minimum expected is either an undergraduate GPA of 2.75 or a graduate GPA of 3.0 , on a four-point scale ; (2) prior professional experience; (3) professional and personal recommendations; (4) Miller Analogy Test score ; (5) Graduate Record Examination (verbal and quantitative) scores; (6) the applicant's writing ability; (7) statement of the applicant's personal and professional goals.
Planning the Program: The relationship between the adviser and doctoral student is viewed as the primary relationship for planning, problem detection, and evaluation. Upon receiving conditional admission a student is assigned an adviser who will assist the student with initial course planning. The program plan of an individual student is viewed as the responsibility of the student. The adviser, in relating to the student, commits Area and University resources to the student's program. Aided by the permanent adviser, the student prepares a plan of study which includes a detailed description of an academic program and related activity. Preliminary thinking regarding dissertation intentions also should be articulated at this time, and the entire program supported by a detailed rationale including. statements regarding the student's goals and intentions, reasons for pursuing them, and beliefs regarding relationships between such goals and the proposed academic program.

Either research or other tool requirements, or both, is dependent upon whether the student elects the $\mathrm{Ph} . \mathrm{D}$. or D.Ed. option.

Credits from other approved institutions may be transferred to the student's doctoral program at the University of Oregon under the following conditions: (a) the courses must be relevant to the degree program as a whole ; (b) the courses must be approved by the Area;
(c) the grades earned must be A or B or equivalent; (d) no more than twothirds of the required credit in any priniary or supporting area may be applied toward the degree requirenients.

After a student has been admitted to the clegree program, no work that is to be applied toward the doctoral program may be taken off-cannpus except with the approval of the candidate's adviser. Advisory Committee: Upon completion of initial program planning, the adviser and candidate nominate an advisory committee to be appointed by the Area Coordinator; membership includes the student's adviser and two addlitional faculty members from within the College of Education.
Full Admission: The student's program to be filed in the Area offices and in the College of Education Graduate Student Records Office must be signed as approved by the adviser (and supporting area adviser for those students electing to pursue a supporting area) and signed as reviewed by menibers of the advisory committee. At this time, the student requests a change in status from conditional to full admission. Upon review and approval of the program by the Area admissions and awards committee, certifications that all requirements will be met, and upon the recommendations of the adviser, the student is notified of full admission by the Area head. Changes in the program following official filing require that a memorandum outlining the changes be filed with the Graduate Student Records Office. The memorandum is to be signed by the student, the adviser, and the chairman of the admission and awards committee.
Comprehensive Examinations: Doctoral candidates in Speech Pothology and Audiology are required to complete a preliminary examination and a comprehensive examination.
The preliminary examination is a writter examination followed by an oral examination designed to provide candidates the opportunity to demonstrate their synthesis and integration of a core of knowledge basic to Speech Pathology and Audiology. The examination is evaluated by members of the faculty. If a student's performance is unsatisfactory, different forms of the examination may be retaken until performance is satisfáctory.
The comprehensive examination is designed to provide the student an opportunity to demonstrate depth of knowledge and scholarship. The examination is taken following completion of course work ; It may be taken earlier
if deemed appropriate by the student's progrann advisory committee. The content and requirements for the examination are negotiated between the candidate and program advisory committee prior to meeting the requirements. The procedure agreed upon is submitted, prior to meeting the requirement, to the curriculum committee for review.

Residence at the University of Oregon: The three-term consecutive residence requirement can be met only subsequent to the development of the program for the doctorate, the approval of this program by the adviser, and the formal submission of the program to the Graduate Student Records Office. The term in which the program is submitted is counted. To satisfy this requirement, a student must be enrolled for at least 9 credit hours per term. It is desirable that the last year before receiving the degree be spent on campus. This enables the student to be on campus with ready access to the library, the adviser, and dissertation advisory committee during the writing of the dissertation.

Dissertation: Planning a dissertation should begin as early as possible and certainly no later than the filing of the program. An official prospectus must be approved by the adviser and the dissertation committee, which is, usually, an enlarged advisory committee including a minimum of four meribers with one member from outside of the College of Education faculty. Five conmmittee members are recommended. The dissertation proposal must be approved by the enlarged advisory committee prior to the time the student begins to engage in dissertation research.

The dissertation for the Ph.D. program may carry from 18 to 30 credit hours. The dissertation for all doctoral programs must carry a minimum of 18 credit hours.

A majority of the members of the dissertation committee must sign that they have read and approved the final version of the thesis before it is submitted in three copies to the Graduate School. Subsequent to the approval of the thesis, a formal oral presentation of the results of the student's research will be scheduled. The presentation usually takes place during the term in which the degree is awarded. The presentation will be open to the public ; it must be attended by the dissertation committee. The Graduate Student Records Office requires two copies of the dissertation abstract and the proposed time and date of the final
presentation of the thesis four weeks prior to the scheduled time.

## Speech Pathology and Audiology

## Undergraduate Courses

SPA 370. Phonetics. 3 credit hours. Study of sounds used in speech : determination of sounds ; their symbolic nature ; their production; physical and psychological problems involved in their perception; sectional differences. A laboratory is required.
SPA 371. Speech Science I. 3 credit hours. A study of the anatomy, physiology, and physics of speech.
SPA 405. Reading and Conference. 1-3 credit hours. Topics to be arranged. Staff.
SPA 407. Seminar. Credit hours to be arranged. Topics to be announced. Staff.

## Upper-Division Courses Carrying Graduate Credit

SPA 409. Practicum. (G) The following practicums are offered with credit to be arranged as noted.
Observational Skills Practicum. 1-9 credit hours. Development of reliable use of classroom and clinical observation techniques for teachers and clinicians.
Clinical Programming. 1-9 credit hours. Development of remedial programs using competencies demonstrated in SPA Observational Skills Practicum. Butler.
Clinical Practicum in the Schools. 1-15 credit hours. Diagnostic and treatment experience in the school setting.
SPA 472. Speech Science II. (G) 3 credit hours. Experimental methods in voice and phonetics; analysis and measurement of variables in the production of speecl.
SPA 473. Lip Reading. (G) 3 credit hours. Methods of teaching lip reading to the deaf and hard of hearing ; the preschool, school, and adult levels; research studies concerning lip reading; and relationships of lip reading to other aspects of audiological rehabilitation and training.
SPA 474. Speech and Hearing Methods in the Schools. (G) 3 credit hours. Specific methods related to remediation of language and speech disorders of school children.
SPA 481. Speech Pathology I. (G) 3 credit hours. A survey of the theory, characteristics, diagnosis and treatment of language and speech disorders with no known organic etiology.
SPA 482. Speech Pathology II. (G) 3 credit hours. A survey of the theory, characteristics, diagnosis, and treatment of language and speech disorders associated with sensory and neurological disabilities and with oral facial abnormalities.
SPA 483. Speech Pathology III. (G) 3 credit hours. An introduction to diagnostics in speech and language disorders; case-history recording, interviewing, basic testing procedures, analysis and criticism of tests. Laboratory required.
SPA 487. Fundamentals of Audiology. (G)
3 credit hours. Basic neurology and anatomy of the ear; psychophysics of hearing; causes, types, and symptomatologies of hearing impairments.

## SPA 488. Audiological Assessment. (G)

3 credit hours. Basic pure tone, air and boneconduction audiometry; interpretation of audiograms; and introduction to speech audiometry.
SPA 489. Audiological Rehabilitation. (G) 3 credit hours. Rehabilitation of hearing impairments ; use of amplification, auditory training; psychology of deafness.

## Graduate Courses

note: Courses numbered 570 and above are generally offered in alternate years.
SPA 501. Research. Credit hours to be arranged. No-grade course. Staff.
SPA 503. Thesis. Credit hours to be arranged. No-grade course. Staff.
SPA 505. Reading and Conference. Credit hours to be arranged. Staff.

## SPA 509. Practicum: Language.

Clinical. 1-9 credit hours. Supervised clinical work with children and adults enrolled for counseling, testing, and treatment in the Speech and Hearing Clinic or other campus and community centers where work can be supervised. Attendance at weekly 509 staff meetings required.
SPA 570. Psychology of Speech. 3 credit hours. Study of speech and language in relationship to other aspects of individual be havior; contributions from various disciplines for the understanding of speech behavior.
SPA 571. Auditory Disorders. 3 credit hours. Advanced study of the etiology, symptomatology, audiometric findings and rehabilitation of hearing loss caused by peripheral, central, and functional impairment ; differential diagnosis of auditory disorders in children.
SPA 572. Disorders of Articulation. 3 credit hours. Advanced study of the nature of articulation and artictilatory problems in children and adults including delayed speech development ; evaluation of techniques in testing ; evaluation of materials and procedures used in therapy ; study of current research findings; demonstration with clinical cases.

## SPA 573. Normal Speech and Language

 Development. 3 credit hours. Emergence and development of normal speech and language in children; acquisition of phonology, syntax, and morphology ; current theories of language acquisition are covered.
## SPA 574. Adult Aphasia. 3 credit hours.

The nature of aphasic disturbance ; diagnosis and treatment of the impairment of motor and auditory speech as a result of cerebrovascular accident ; language assessment in aphasic cases; family counseling; methods of therapy ; case demonstrations and studies
SPA 575. Stuttering. 3 credit hours. The etiology, symptomatology, diagnosis, and treatment of stuttering behavior.
SPA 576. Voice Disorders. 3 credit hours. Psychogenic and organic disorders of the voice ; diagnostic and rehabilitative approaches for vocal abuse, conversion aphonia and spastic dysarthria mutational falsetto and laryngectomized patients.

## SPA 577. Cleft-Palate Speech. 3 credit

hours. Congenital cleft palate and cleft lip; implications for speech therapy; related orofacial abnormalities. Augustine.
SPA 578. Diagnostic Procedures in Speech Pathology. 3 credit hours. Rationale and use of the major instruments, procedures, and
materials used in conducting diagnostic work in cases of speech disorders; organizing diagnostic data and writing the clinical report.
SPA 579. Language Disorders of Children. 3 credit hours. An intensive study of language disorders of children; emphasis on contributions from linguistics, psychology, neurophysiology, and learning theory.
SPA 580. Motor Speech Disorders. 3 credit hours. Nature of speech disorders associated with lesions of central and peripheral nervous systems.
SPA 581. Auditory Processing. 3 credit hours. A consideration of basic auditory processing parameters. Relationships to learning disabilities included.

## DeBusk Memorial Center

James R. Booth, M.A., Coordinator ; Senior Clinical Supervisor, Counseling. Anita Archer, M.Ed., Senior Clinical Supervisor, Learning Disabilities. Charlotte Peterson, M.A., Senior Clinical Supervisor, School Psychology
DeBusk Memorial Center is a service training and research facility functioning as part of the Division of Developmental Studies of the College of Education. The Center was named in honor of the pioneering work of Dr. W. D. DeBusk who taught at Oregon from 1915 to 1937. He skillfully integrated the findings from psychology, medicine, and education in diagnosing learning and behavior problems. The Center continues this interdisciplinary approach. In 1960, the Center was expanded with a grant from the Oregon State Department of Education. Its purposes are to provide assessment and counseling to clients with a wide range of concerns, and to provide tutoring for children experiencing learning disabilities.

Graduate students at the master's and doctoral levels participate with faculty clinical supervisors in various programs as an integral part of their professional preparation.

DeBusk also offers consultant services which are available for developing and evaluating various pupil personnel services within a school district. Fees for consultative services vary, depending upon the scope of the project.

## Speech and Hearing Center

Lloyd E. Augustine, Ph.D., Coordinator Assistant Professor of Education (speech pathology-audiology).
The Speech and Hearing Center is at 901 East 18th Avenue in the Clinical Services Building.

The Center's primary function is to educate and train Speech Pathologists and Audiologists. An integral part of this educational program is clinical therapy practicums. To provide a significant practicum experience for the student, the Center provides consultations, evaluations, and therapy for individuals with the following difficulties: disorders of language and speech, hearing loss and deafness, cleft palate, articulation, stuttering, aphasia (loss of language due to injury or stroke), mental retardation, cerebral palsy, physical injury, post-laryngectomy. As part of their education process, graduate and undergraduate students participate in and conduct the diagnostic and therapeutic activities under the supervision of certified Speech Pathologists and Audiologists from the University faculty.
Anyone may make referrals to the Center. Most commonly, referrals are made by professional agencies, teachers, doctors, or by the individual.

## University Year for Action

Anita J. Runyan, Ph.D., Director and Assistant Professor of Education Robert H. Coiner, Ed.D., Field Instructor
Ida C. Pacheco, M.A., Field Instructor
The University Year for Action program provides an opportunity for students to volunteer full-time for 12 months in a community agency while continuing as full-time students in their academic programs. They receive stipends, health benefits, and one year of federal civil service credit.
Students work to expand services or develop new programs for low-income persons to meet the needs of youth and children, seniors, and adult special populations such as the mentally and emotionally disturbed, the developmentally disabled, or clients of the correctional system. A wide variety of positions are available including program planning and evaluation, community development, service delivery, group work, and program management.
Admission is open to upper-division and graduate students in disciplines concerned with human development and community service. Field instruction and academic credit are offered through the Division of Developmental Studies, but students may arrange to substitute individualized program credit through faculty in their own departments. Students interested in admission may consult Dr. Runyan.


## Division of <br> Teacher Education

## Administrative Faculty

Richard H. Hersh, Ed.D., Associate Dean, Professor of Education (social studies, history, political science). B.A., 1964, M.S., 1965, Syracuse ; Tufts, 1966; Ed.D., Boston, 1969.
William H. Harris, D.Ed., Director, Teacher Education, Associate Professor of Education (social studies, inquiry, teaching strategies). B.A., Willamette, 1949 ; B.S., 1951, M.S., 1953, Eastern Oregon; D.Ed., Oregon, 1967.
Fay Haisley, Ph.D., Area Coordinator, Elementary Education, Assistant Professor of Education (mildly handicapped). B.A., Papua and New Guinea, 1970 ; M.Ed., 1971, Ph.D., 1973, Oregon. Karl D. Hesse, Ph.D., Area Coordinator, Secondary Education, Assistant Professor of Education (secondary reading). B.S., Wisconsin State, 1962 ; M.S., 1968, Ph.D., 1972, Wisconsin. Ray E. Hull, D.Ed., Director, Field Placement, Associate Professor of Education (science education, supervision). B.S., 1958, M.S., 1962, Oregon State; D.Ed., Oregon.
Wayne D. Lance, Ed.D., Area Coordinator, Special Education, Professor of Education (special education). B.A., 1953, M.A., University of Redlands, 1960 ; Ed.D., Peabody, 1964.

The Division of Teacher Education in the College of Education offers degree programs at the baccalaureate, master's and doctoral levels, and programs leading to Basic and Standard certification for elementary and secondary teachers, teachers of exceptional children, and reading specialists. The Division also offers a program leading to an Oregon Personnel Service Certificate with the School Supervisor's endorsement. Areas of emphasis in graduate study in Curriculum and Instruction are available in elementary and secondary education, early childhood education, reading and language arts, curriculum and supervision, and instructional technology and content. Undergraduate and graduate courses in community education are offered through the College of Education's Northwest Community Education Development Center.

Within the Division, in addition to the programs offered through the Area of Curriculum and Instruction, the Area of Special Education offers work leading to certification or endorsement
for teachers of handicapped children, and master's and doctoral degree programs. Areas of emphasis are available in mental retardation, behavior disorders, learning disabilities, crippled and other health-impaired, and administration of special education. The University of Oregon does not offer a major in Special Education at the undergraduate level ; however, undergraduates may enroll in a wide variety of Special Education courses.

Teacher preparation programs offered by the Division are accredited by the Oregon Teacher Standards and Practices Commission and by the National Council for Accreditation of Teacher Education.

The Department of Art Education of the School of Architecture and Allied Arts, and the Department of Music Education in the School of Music, offer cooperative degree programs at the graduate level through the Area of Curriculum and Instruction.

## Curriculum and Instruction Area Faculty <br> Fay Haisley, Ph.D., Area Coordinator, Elementary Education, Assistant Professor of Education (mildly handicapped). B.A., Papua and New Guinea, 1970 ; M.Ed., 1971 , Ph.D., 1971, Oregon.

Karl D. Hesse, Ph.D., Area Coordinator, Secondary Education; Assistant Professor of Education (secondary reading). B.S., Wisconsin State, 1962 ; M.S., 1968, Ph.D., 1972, Wisconsin. Keith A. Acheson, Ed.D., Associate Professor of Education; Director, Teacher Corps (program development, supervision). B.S., 1948, M.S., 1951, Lewis \& Clark; Ed.D., Stanford, 1964. Richard Arends, Ph.D., Assistant Professor (secondary education). B.S., 1955, Eastern Oregon ; M.A., 1961, Iowa; Ph.D., 1972, Oregon.
Terry Bullock, Ed.D., Assistant Professor (secondary education, reading). B.A., 1961, M.A., 1969, Michigan State; Ed.D., 1975, Indiana.
Judith Coffey, M.A., Instructor (group process, teaching strategies, curriculum development). B.A., Knox College, 1963 ; M.A., Oregon, 1973. Edna P. DeHaven, Ph.D., Associate Professor of Education (elementary reading and language arts). B.S., Oregon College of Education, 1951 ; M.Ed., 1962, Ph.D., 1969, Oregon. V. Knute Espeseth, Ph.D., Associate Professor of Education (crippled and other health-impaired). B.S., North Dakota State Teacher's, 1955 ; M.S.,

North Dakota, 1961 ; Ph.D., Wisconsin, 1965.

Gary W. Ferrington, M.S., Senior Instructor in Education (educational media). B.S., Portland State, 1964 ; M.S., Southern California, 1967.

Meredith Gall, Ph.D., Director, Graduate Programs, Associate Professor (instructional development). B.A., 1963, M.Ed., 1963, Harvard ; Ph.D., 1968, Berkeley.
Enrique Gallegos, M.A., Instructor (education of disadvantaged youth) B.A., Texas, El Paso, 1968 ; M.A., Oregon, 1976.
William H. Harris, D.Ed., Associate Professor of Education, Director of Teacher Education (social studies, inquiry, teaching strategies). B.A., Willamette, 1949 ; B.S., 1951, M.S., 1953, Eastern Oregon; D.Ed., Oregon, 1967.

Larry L. Horyna, M.A., Assistant Professor of Education ; Director, Northwest Community Education Development Center (community education). B.S., Oregon, 1964 ; M.A., Central Michigan, 1968.
Ray E. Hull, D.Ed., Director, Field Placement, Associate Professor of Education (science education, supervision). B.S., 1958, M.S., 1962, Oregon State; D.Ed., Oregon, 1969.
Mae L. Jackson, Ed.D., Associate Professor of Education (reading, language arts, elementary curriculum). B.A., 1951, M.A., 1953, University of Michigan; Ed.D., Wayne State University, 1964.
William E. Lamon, Ph.D., Associate Professor of Education ; Director, Psychological Research Laboratory of Mathematics Education (mathematics). B.S., University of San Francisco, 1964 ; M.S., California State, 1965 ; Ph.D., Berkeley, 1968.
Stanley Lynch, M.Ed., Assistant Professor of Education (multicultural education). B.S., 1950, M.Ed., 1960, Indiana.
Susan J. Miller) M.Ed., Senior Instructor in Education (social science, questioning strategies). B.A., 1955, M.Ed., 1962, Oregon.

Vernice T. Nye, M.A., Professor of Education (elementary language arts, social studies, early childhood). B.S., North Alabama University, 1944 ; M.A., George Peabody, 1948.

Roy R. Poole, Ph.D., Assistant Professor of Education (multicultural education). B.A., San Francisco State, 1967 ; M.A., 1970, Ph.D., Oregon.
Mildred C. Robeck, Ph.D., Professor of Education (elementary reading, early
childhod, child development). B.A., 1951, M.Ed., 1954, Ph.D., 1958, Washington.
Kenneth Rupp, M.Ed., Adjunct Assistant Professor (elementary curriculum and instruction). B.S., 1967, M.Ed., 1970, Oregon.
Dävid A. Santellanes, Ed.D., Assistant Professor of Education (supervision, community education). B.A., Arizona State, 1968 ; M.A., Central Michigan, 1971 ; Ed.D., Arizona State, 1973. Oscar F. Schaaf, Ph.D., Professor of Education (secondary mathematics). B.A., University of Wichita, 1942 ; M.A., Chicago, 1946 ; Ph.D., Ohio State, 1954.
Clarence W. Schminke, Ph.D., Professor of Education ; Director, Summer Session (elementary). B.A., 1950, M.A., 1954, Iowa State Teachers College ; Ph.D., Iowa, 1960.
Virginia Schwartzrock, M.A., Adjunct Assistant Professor (teacher liaison). B.A., University of Southern California at Los Angeles, 1954 ; M.A., Oregon, 1977.

John E. Suttle, Ed.D., Professor of Education (curriculum, supervision). B.S., Texas, 1948 ; M.Ed., Colorado, 1952 ; Ed.D., Texas, 1960.
Robert A. Sylzeester, D.Ed., Professor of Education (elementary science education, elementary curriculum). B.S., Concordia Teachers College, 1949 ; M.Ed., 1953, D.Ed., 1961, Oregon.
Dirk TenBrinke, Ph.D., Adjunct Professor (science education). B.S., 1943, M.A., 1956, Ph.D., 1964, Minnesota.

Calvin J. Zigler, D.Ed., Assistant Professor (resident master's degree program ). B.A., 1954, M.A., 1955, Denver ; D.Ed., Oregon, 1972.

## Faculty Emeriti

Guy Shellenbarger, M.Ed., Professor Emeritus of Education (supervision, secondary education). B.S., 1936, M.Ed., 1953, Oregon ; at Oregon since 1965.

## Teacher Certification

Basic and Standard Teaching Certificates are issued by the Oregon Teacher Standards and Practices Commission to qualified appicants who have completed an approved teacher-education program and have the recommendation of the teacher-education institution in which they complete the program. The teaching certificate will have endorsed upon it the level at which the holder is licensed to teach and, where applicable, the subject matter endorsements
or specialties the holder is licensed to teach.

The Basic certificate is the initial license to teach, normally based on four years of preparation and the baccalaureate degree. The Standard certificate requires completion of a fifth year (at least 45 credit hours) of additional preparation.
Requirements for Basic Elementary or Secondary Teaching Certificate: The University will recommend to the Oregon Teacher Standards and Practices Commission issuance of a Basic Teaching Certificate, valid for a maximum of three years, to an otherwise qualified applicant who: (a) has a baccalaureate degree; (b) has completed the University's approved teacher-education progran, including completion of requirements for either the basic elementary or secondary level of certification and, where applicable, requirements for appropriate endorsements in a subject matter teaching specialty; (c) is recommended by the appropriate School or Department and the College of Education as having adequate preparation and the personal qualities to serve as a teacher.
Requirements for Stndard Teaching Certificate: The University will recommend to the Teacher Standards and Practices Commission issuance of a Standard Teaching Certificate upon verification of completion of the University's approved Standard certification program for the teaching level and subject endorsement (s) to total a planned program of not less than 45 credit hours of upper-division graduate level work. The master's degree helps obtain the University's recommendation for Standard certification only if the degree program includes the appropriate certification requirements. The University also must recommend to the Commission that the applicant has the personal qualities to serve as a teacher. In addition to the University's recommendation, the Teacher Standards and Practices Commission will require verification of: (a) two years of successful, legal teaching experience acceptable to the Commission (two periods each of eight consecutive months, full-time) during the life of the Oregon Basic Teaching Certificate; (b) official transcripts, application, and other items required for the issuance of either the specific certificate or the endorsement requested.
Requirements for Basic and Standard Reading Endorsement: The Division offers professional course work and field experience designed to prepare
students to qualify for endorsement as reading specialists. This program includes the following practicum requirements : For the Basic Reading Endorsement, CI 409 Reading Practicum I (2-3 hours) and CI 409 Reading Practicum II (2-6 hours) are required. The Reading I practicum is taken concurrently with CI 335 Reading in the Elementary Schools; CI 431 Reading in the Primary Grades, CI 432 Reading in the Intermediate Grades, and CI 469 Reading and Writing in the Secondary School. These practicums are supervised experiences that provide students with opportunity to apply the skills that they have learned in the courses listed above and involve individual and small group instruction within remedial, corrective, and developmental reading programs. The Reading II practicum is the culminating practicum for the Basic Reading endorsement. The student will be assigned to a reading specialist to get additional experiences in reading instruction and expanded classroom responsibility. It also is expected that the student will explore such topics as classroom management, evaluation of the reading program, record keeping, materials selection, and the role of the reading consultant.

Requirements for the Standard reading endorsement include CI 409 Reading Practicum III. This practicum is designed to provide advanced training experience for students in school settings where they will have the opportunity to develop and extend competence in initiating, implementing, administering, and evaluating school reading programs; and to gain skills in the ability to work with teachers and administrators at the building and district level in either a consultant or coordinator capacity or both.

Requirements for the Personnel Service Certificate with Supervisor's Endorsement: The Curriculum and Instruction Area also offers a program leading to Oregon Basic or Standard certification as a Personnel Service Specialist with the School Supervisor's endorsement. The University's program to prepare students for the Supervisor's endorsement is currently subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission, effective January 1, 1980. Interested students should constult the adviser for the program in the Division of Teacher Education ; one may also consult John Suttle, and the Office of Certification in the College of Education for specific
information relating to program requirements.

Students should consult the Office of Teacher Certification in the College of Education for information or referral regarding specific University programs for preparing education personnel, acceptance of transfer credit from other institutions, the Division of Continuing Education, Independent Study and the University's community education program, residence requirements, renewals, prior and current rules for certification, required fees, and application procedures.

Applicants for a teaching certificate who have been convicted of a criminal offense other than a minor traffic violation will be asked to furnish evidence of moral fitness to teach. Forms for this purpose are available in the Office of Teacher Certification.

Students are urged to consult the University's Office of Career Planning and Placement in Susan Campbell Hall for additional assistance and information relating to career opportunities in education, and for preparation of a personal placement file.

## Elementary Teacher Education

The Elementary Teacher Education Progran at the University of Oregon is directed toward providing a broad educational background for prospective elementary teachers; providing opportunity for the extended development of skills and knowledge in areas of special interest; providing opportunity for development and application of teaching skills and strategies; facilitating commitment to the teaching profession and to the process of working with elementary level children in an instructional setting.
Admission to Elementary Teacher Education: Students planning to enter the Elementary Teacher Education Program are admitted to the University as majors in pre-education in the College of Education until they are cleared for full admission to the program, dependent upon an interview and recommendation by a screening committee. Students should recognize that admission is not automatic and quality control is being imposed. Screening interviews and tests will be held each term, and students are urged to review carefully their materials for admission. Grades of D for major course requirements in Elementary Education are not acceptable. Upon admission, the major will be changed to indicate Curriculum and Instruction in Elementary Education. Admission packets for screening purposes and information may be
secured from the College of Education's Office of Field Experience.
Progran of Studies: The University's Elementary Teacher Education Program includes, within the four-year period of study toward the baccalaureate degree, work designed to satisfy certain general University graduation requirements while at the same time meeting certain specific program requirements. In addition, the program includes work to satisfy other specific College of Education requirements for majors in Elementary Education and recommendation for Basic Certification as an Elementary teacher.

Provision for extended field experience in public elementary schools, including a term of full-time student teaching, is designed to insure that prospective elementary teachers have adequate experience in actual school settings to enable them to gain basic competence needed for successful performance as an elementary teacher, and to relate study on-campus to application in the school setting.
Program Revision Information: Please note that at the time of preparation of this catalog, a committee of faculty members from the College of Education and other departments of the University, and practicing elementary teachers and administrators was stuclying the Elementary Teacher preparation program toward the goal of revision to consolidate the skills of regular and special educators to meet the demand for teachers who can work effectively in classrooms where handicapped children are being infused under provisions of recent federal and state legislation. The revised program, following approval by the University Teacher Education Committee, must be approved by the Oregon Teacher Standards and Practices Commission before it can be implemented. The projected development schedule calls for beginning the phase-in process for a revised program during the 1978-79 academic year. Students interested in Elementary Teacher Education should consult the Office of Elementary Education (Room 116) in the College of Education for specific information.
Basic Requirements and Credit Hours: Elementary Teacher Education students working toward the B.A. or B.S. degree through the College of Education must complete specific minimum amounts of work in each of three areas or groups of study: Arts and Letters, Social Sciences, and either Sciences or Mathematics, or both, with a 36 credit hour concentration in one of these. For the B.A. degree, students must complete
a minimurm of 36 credit hours in work classified by the University as Language and Literature. (Work classified as Language and Literature is more restricted than work classified as Arts and Letters: B.A. degree candidates should check carefully the current Time Schedule of Classes to determine which courses qualify to satisfy the Language and Literature requirements.) For the B.S. degree, a 36-hour block of work is required in either the Social Sciences or in Science or Mathematics, or both. For either degree, a minimum of 18 credit hours is required in each of the remaining two groups not selected for the concentration. Normally, courses completed to satisfy the 36,18 , and 18 hour requirements also will satisfy certain other College of Education requirements for elementary teacher certification.

In addition to the above requirements, Elementary Education students are urged to select additional work in a specialty area such as Reading, Special Education, Art, Music, Foreign Language, Health Education, Physical Education, Outdoor Education, or Early Childhood Education.

Students interested in Elementary Teacher Education are urged to make their interest known to the Curriculum and Instruction Area secretary ( Room 116, College of Education) for assignment to an adviser for Elementary Education, to facilitate orderly program planning which will meet all University and College requirements.
Present Program Outline (To apply to students completing programs during 1978-79 only)
Basic Requirements, Credit Hours (A) Arts and Letters (18 hours minimum)
English Composition (Wr 121 and one of the following: Wr 122, 123, or 323) 6 (total)
Art in the Elementary School (Art 322) ... 2

Music Fundamentals (Mus 321, 322) 4 (total)
Electives.. . 6
(B) Social Sciences (18 hours minimum)
U.S. History. .3

Electives. . . 15
(C) Science and Mathematics (18
hours minimum)
Math for Elementary Teachers (Mth 123) ... 3

Environmental Science . . . 3
Electives . . . 12
Professional Education Requirements (Credit Hours)
(A) Allied Professional School Courses

Physical Education (PE 121-191) ... 2

Games and Sports (PE 321) ; Posture and Development (PE 322) ; Rhythms and Dance (PE 323) ... 6 (total) (Note: PE 321, 322 and 323 may be taken to satisfy three of the five PE activity terms required for University graduation.)
Art in the Elementary School (ArE 323) . . 3

Music Methods for Elementary Teachers (MuE 383) ... 3
Consumer Issues (Mkt 407) ... 3 Elementary School Health Education (HE 440) . . 3 (Note: satisfies University requirement in Health.)
Children's Literature (Lib 451) . . . 3
(B) College of Education Courses

Human Development and Learning sequence (EPsy 321, 322, 323) ... 6 (total)
Social Foundations of Education (EdP 327) . . . 3

Mathematics in the Elementary School (CI 333) ... 3
Social Studies and Language Arts in Elementary School (CI 334) . . . 5 Teaching Science in Elementary School (CI 336) ... 3
Teaching Reading in Primary grades (CI 431) ... 3
or
Teaching Reading in Intermediate Grades (CI 432) . . . 3
Problems of Minorities in Schools
(CI 407) . . 3
Educational Media (CI 435) . . . 4
Career Guidance Education (CI 407) ... 1-3
(C) Field Experience

Pre-practicum CI 409: Practicum
(September Experience or Practicum
Elementary School or Practicum
ESCAPE Tutoring) ... 3
Instructional Assistantship (junior year)

Practicum: Instructional Assistant (CI 409) . . . 12
Seminar: Student Teaching (CI 407) ... 2 (taken with Instructional Assistantship)
Teaching Reading in Elementary
School (CI 335) . . . 3 (taken with
Instructional Assistantship)
Student Teaching (senior year)
Elementary Student Teaching
(CI 415) ... 15
Seminar: Student Teaching (CI
407) ... 2

Note: Application for assignment to the Instructional Assistantship, and to Student Teaching, must be made not later than the beginning of the term prior to the term the respective field experience is to be taken.

To determine the applicability of work completed through other institutions, the Division of Continuing

Education, the University's community education enrollment, or on the basis of experience, contact the Office of Teacher Certification, College of Education.
Normal progression through the program is accomplished through the following sequence of activities:

## Freshman and sophomore years:

 Meeting with adviser assigned through the Curriculum and Instruction office. Completion of courses of instruction to meet general University requirements, and to expand personal knowledge and interests. Involvement in preprofessional field work experience with children in school settings. Application for formal admission to the Elementary Education Program during the sophomore year; (admission materials are available in the Office of Field Experience, College of Education).Junior year: Continuation of course work to meet general University requirements and student's choice of group concentration ; specialization in professional education begins; completion of prestudent teaching practicum work in elementary schools and completion of associated coursework.
Senior year: Completion of course work to meet remaining University requirements; completion of requirements in professional education; one term of full-time student teaching in a public elementary school; certification packet secured from the Office of Teacher Certification, College of Education.
Job Placement: A personal file for placement purposes should be established with the Office of Career Planning and Placement, Susan Campbell Hall, at least one term prior to assignment to student teaching.

## Recommendation for Certification:

 Upon satisfactory completion of degree and program requirements, the University will recommend to the Teacher Standards and Practices Commission issuance of an Oregon Basic Teaching Certificate, with the endorsement for general elementary level teaching. The University also offers work leading to recommendation for Oregon Standard Elementary certification with the Standard elementary endorsement. (Work taken toward Standard certification must be done as part of a planned program of advanced teacher education, which plan must be filed with the College of Education's Office of Teacher Certification prior to initiation of the required work. Forms for this purpose are available through the Office of Teacher Certification.)Secondary Teacher Education At the University of Oregon, the Secondary Teacher Education Program is a cooperative effort of the College of Education and other University colleges, schools, and departments offering approved programs for preparing. secondary teachers in given teaching fields. The program is designed to insure that, upon completion, students will be prepared to enter teaching with the following qualifications: a broad liberal arts background ; strong subject matter preparation in the teaching field, an understanding of theories of human development and the learning process ; proficiency in basic communication skills; skills in teaching strategies and methodology ; observation and instructional experiences with secon-dary-level students in field settings to insure a successful start in teaching; an understanding of the professional obligations of a teacher.
Program Admission: The University offers approved programs leading to recommendation for teaching certificate endorsement in the following Oregon endorsement areas: Art; Drama; Driver Education ; Educational Media; Foreign Language (available in French, German, Italian, Latin, Russian, Spanish) ; Health Education (K-12); Health Education (combined) ; Journalism; Language Arts (English); Language Arts and Social Studies; Mathematics; Music (K-12) ; Physical Education (K-12) ; Physical Education (5-12) ; Reading; Science: (Biology, Chemistry, Physics, Earth Science, Integrated Science) ; Social Studies (available through the Departments of Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology) ; and Speech.
Each University college, school, or department offering a secondary teacher education endorsement program has one or more faculty members, known as norm (endorsment) advisers, responsible for advising prospective secondary teachers in the teaching endorsement program offered through the respective college, school, or department. Students interested in secondary teacher education are urged to make their interest known as early as possible in their University career in order to obtain accurate information that will allow them to plan their course of study efficiently. Students should consult the appropriate adviser for the subjectmatter teaching endorsement in which they are interested, and the Office of Secondary Education in the College of Education for specific requirements, advice, and assistance. This should be
done prior to the beginning of the junior year: entrance into the program at a later time may necessitate extending the preparation period beyond the usual four-year degree program.

Full admission to the Secondary Teacher Education Program is dependent upon satisfactory completion of subject-matter endorsement and professional education work required prior to student teaching, and the recommendation of the student's advisers.
Program Requirements: The University's Secondary Teacher Education Program has two major components : preparation in the proposed subjectmatter teaching endorsement, and preparation in professional education. Prospective secondary teachers major, and complete a degree, in the school or college offering the appropriate subjectmatter preparation; the majority of the required work in professional education is completed through the College of Education.

The professional education component of secondary teacher education requires work in the foundations of education, human development and learning, the teaching of reading and writing in the secondary school, education media, teaching strategies and methods, and practicum work in the public secondary schools, including student teaching. Grades of $D$ in required professional education courses do not satisfy program requirements.

Students who successfully complete the program will be recommended by the University to the Oregon Teacher Standards and Practices Commission for Basic certification as a secondary teacher with the appropriate certificate endorsements for the level and subject assignment.

Program Revision: Please note that certain changes in certification requirements adopted by the Oregon Teacher Standards and Practices Commission effective January 1, 1980, will be reflected in the University's requirements for Secondary Teacher Education. Effective in October 1979, prospective speech, drama and journalism teachers must also qualify for the Oregon language arts endorsement. At the time of preparation of this catalog, the exact structure of the revised programs had not been determined. For specific information, students are advised to consult with the Office of Secondary Education in the College of Education or the norm adviser for teacher education in the University department which offers the teaching endorsement preparation in which the student is interested.

To determine the applicability of work completed through other institutions, the Division of Continuing Education, the University's continuing education enrollment, or on the basis of experience, consult the Office of Teacher Certification, College of Education.
Normal progression through the undergraduate program is as follows:
Freshman year: Work begun toward University general education requirements, and toward proposed major.

Sophomore year: Interest in secondary teacher education declared; consultation with Office of Secondary Education in College of Education and with apropriate subject-matter norm adviser for proposed teaching endorsement; completion of prepracticum experience.
Junior year: Completion of University general education requirements and concentration on major and subjectmatter endorsement requirements ; initial sequences of required work in professional education completed; completion of prestudent teaching practicum experience (if not taken in sophomore year) ; application to student teach registered with the Office of Field Experience, College of Education.
Senior year: Completion of degree, major, and teaching endorsement requirements; completion of professional education requirements, including one full term of full-time student teaching; final recommendation for certification secured from norm endorsement adviser and from College of Education; certification packet secured from the Office of Teacher Certification.

Standard Teaching Certificate, Secondary Level
The University of Oregon also offers a complete program of education leading toward the Standard Teaching Certificate for the secondary level, and Standard teaching endorsements. To be eligible for University recommendation for the Standard Teaching Certificate and Standard endorsements requires successful completion of a planned program of advanced teacher education, which plan must be filed with the Office of Teacher Certification in the College of Education at the time the work is initiated. Completion of work required for a master's degree does not satisfy requirements for either the Standard Teaching Certificate or endorsements, unless the degree work
also includes certificate and endorsement requirements. Program planning forms and information relating to the Universtiy's Standard teacher education program may be secured from the Office of Teacher Certification.

## Graduate Programs

Graduate work in the Area of Curriculum and Instruction is offered for the preparation of teachers, supervisors, and other educational specialists, including programs leading to the Master of Arts, Master of Science, Master of Education, Doctor of Philosophy, and Doctor of Education degrees. Areas of emphasis are offered in early childhood education, elementary education, secondary education, curriculum and supervision, community education, instructional systems technology, and reading and language arts.

Doctoral degrees emphasizing art education and music education also are administered through the Area of Curriculum and Instruction. Persons wanting specific information concerning these degrees are directed to the Art Education Department of the School of Architecture and Allied Arts, or the Music Education Department of the School of Music.

By careful planning, it is possible to complete a program of graduate study which meets requirements for Oregon Standard Teacher Certification and also the master's degree ; as noted above, however, completion of a master's degree progam does not satisfy requirements for Standard certification unless the certification requirements are included as part of the degree program.

Specific information concerning graduate admission procedures and program requirements through the Area of Curriculum and Instruction may be obtained from the Graduate Student Records Office in the College of Education.

## Early Childhood Education.

The Area of Curriculum and Instruction offers the following programs in early childhood education: (1) area of elective concentration for elementary teacher certification; (2) master's degree with emphasis on early childhood education; (3) doctoral degree with specialization in the development and training of the child from birth through the primary school years. Graduate programs are individually planned with an area adviser to meet the professional goals of the student and
the requirements of the College of Education and the Graduate School. Potential interdisciplinary studies include those courses in the college and across campus which focus on early development and the learning environment.

Early childhood education incorporates theory, practice, and research which spans the ages from birth to eight years. Courses and seminars cover the relationship of affective and cognitive learning, physical and intellectual development, acculturation and socialization, school and home environments, and curricula for nursery and primary schools.

## Elementary Education

The Area of Curriculum and Instruction offers programs of advanced study leading to Standard elementary teacher certification and/or advanced degrees with a specialty in elementary education. The graduate programs in the field of elementary education are designed to provide continued study opportunities for professional personnel in the field and, with the cooperation of other divisions of the University, to prepare master elementary school teachers, elementary school principals, supervisors, college teachers in the field of elementary education, and other specialists with responsibilities for the education of elementary-age children.

## Secondary Education

The Area offers programs of advanced study leading either to Oregon Standard teaching certification or to advanced degrees or both with a specialty in secondary education. The master's degree in secondary education is designed to provide students with theoretical and applied knowledge appropriate to their individual professional goals and interests. Instruction is directed toward development of knowledge and understanding in the general areas of curriculum, teaching strategies, and foundations of education. Students are encouraged to pursue a course of study in addition to that offered through the Division of Teacher Education as appropriate to their individual needs. It is anticipated that students entering this program will be experienced teachers seeking further to develop skills as classroom teachers and/or develop special skills and knowledge appropriate to a redefined professional role. Students completing the secondary master's degree program may be qualified for positions such as curriculum specialist, or department or area chairman or coordinator.

## Curriculum and Supervision

The graduate program in curriculum and supervision provides continued opportunities for professional personnel in the field. Programs may be developed leading to positions as supervisors and curriculum consultants and to a doctoral degree. Also offered is a special progrann which leads to an Oregon Personnel Service Certificate with the School Supervisor's endorsement. Programs of study emphasize theory, research, and skill development. Opportunities for observation and field experiences are available in the public schools.

## Community Education

The need for professional leadership in the rapidly growing field of Community Education has prompted the development of a program which meets the needs of new and experienced commu-nity-school personnel. The program of study consists of academic and practicum experiences specifically designed to provide students with the necessary skills to assume entry level and management placements within community schools. Community Education coursework will be integrated with other academic programs to comprise an area of special emphasis in Community Education.

## Instructional Technology

A graduate curriculum with an emphasis in Instructional Technology is beginning its second year within the Area of Curriculum and Instruction. Interested students have the option of following a generalist or a specialist course of study in the following areas:
(1) Instructional Design; (2) Instructional Product and Systems Evaluation ; (3) Instructional Product Development ; (4) Instructional Research, Development, Dissemination, and Management.

## Reading and Language Arts

The Area of Curriculum and Instruction offers graduate reading and language arts courses in elementary and secondary reading instruction, and in diagnosis and correction of reading disabilities. The program of studies prepares: (1) reading and language arts consultants and supervisors at the elementary and secondary levels;
(2) elementary classroom teachers;
(3) secondary reading teachers; and
(4) reading specialists in the diagnosis and correction of extreme learning problems.

Master's Degree Programs.
in Curriculum and Instruction
Filing Application :
Students interested in pursuing one of the master's degree programs offered through the Area of Curriculum and Instruction must submit the completed Application for Graduate Admission first copy (green) and official transcripts of all previous college or university work with a ten dollar ( $\$ 10.00$ ) application fee (unless previously matriculated at the University of Oregon) to the Admissions Office, P. O. Box 3237, University of Oregon, Eugene, Oregon 97403.
Submit
(a) the remaining copies of the Application for Graduate Admission; (b) an official copy of transcripts of all previous college work; (c) the Personnel Record; (d) threc recommendations from appropriate professional sources. to:
Graduate Student Records
College of Education, Room 111
University of Oregon
Eugene, Oregon 97403
(A special form, Request for Permission to Re-Register in the Graduate School, must be used in place of the Application for Graduate Admission by students who have been previously admitted to the Graduate School at the University of Oregon.)

## Obtaining Information :

To be considered for admission, a prospective student's file, including the application, Personnel Record, transcripts, and recommendations, must be completed according to the following schedule: (1) Summer Session
Admission by June 1; (2) Fall term Admission by August 1 ; (3) Winter term Admission by December 1 ; (4) Spring term Admission by March 1.

Minimum Criteria for admission include:
(1) A 2.75 undergraduate G.P.A.
(2) Relevant professional experience as determined by program area staff. The Master's Degree Admissions Committee interprets "relevant professional experience" as requiring candidates to have completed teacher certification requirements.
(3) Positive recommendations as provided by the student.
Any or all of the above may be waived upon sponsorship of the applicant by a faculty member of the department.

Subsequent to each of the filing deadlines, all applicants will be evaluated by a departmental Master's

Degree Admissions Committee. Each student will receive departmental notification of committee action. Upon receiving admission, the student will be assigned an adviser. With student initiative, the adviser will assist in professional decisions regarding general foundation courses, specific program planning, equivalency of courses taken under differing titles as well as substitution and electives.

Ancillary Guidelines:
(1) Total Credit. A planned program having a minimum of 45 credit hours including a field study or thesis is required, or 48 credit hours without a field study or thesis. All work applicable to a program of studies must be concluded within seven years. Thirty credit hours must be in Education. Not more than twelve credit hours of Education 508 (Workshop) are acceptable toward a degree program. (University of Oregon credit hours are earned during the terms of Fall, Winter, Spring, Summer. One and one-half term hours equals one semester hour.)
(2) Transfer. Not more than 15 term hours of graduate work taken elsewhere may be applied to a degree program. Study completed through Committee Education is considered transfer work. Correspondence study is not applicable to a master's degree.
(3) Residence. A minimum of 30 term hours of resident (on-campus) graduate study is required: If a student has less than 12 hours of transfer work, three terms must be on campus; if 12-15 term hours of transfer, two terms must be on campus. Twenty-four term hours of study must be graded courses taken at the University of Oregon. Nine tern hours must be " 500 " level courses.
(4) Continuous Enrollment. Every master's degree student is required to maintain continuous enrollment while completing all requirements for the degree. Three classes of registration are available which meet this requirement: they are (1) full-time registration; (2) part-time registration; or (3) onleave status. Summer session only students must file an "on-leave" each fall. Although a previously accepted student who has not maintained continuous enrollment may apply for re-registration, he or she must satisfy the requirements for admission in effect at the time of re-registration. (5) Language Requirement. For the Master of Arts degree only, the student must show by examination, or by adequate undergraduate courses (completion of the second-year college
course) a reading knowledge of one foreign language.
(6) Final Examination. A written comprehensive examination is required for all master's-degree candidates. The examination must be taken during the term in which the candidate expects to receive the degree. An Application for Completion of Master's Degree and Written Comprehensive Examination should be secured from and filed in the Graduate Student Records Office, College of Education, during the first week of the final term. Examinations are offered once each term and the dates are published by the College of Education Graduate Student Records Office. Oral examination for the M.A. and M.S. degrees is discretionary.
(7) Application for Degree. All candidates for a master's degree must be registered for a minimum of three term hours of credit during the term they expect to receive a degree. An Application for Degree card must be secured from and filed with the Registrar within the first three weeks of the beginning of the final term.

## Doctoral Degree Programs in Curriculum and Instruction

The Area of Curriculum and Instruction offers two doctoral degrees. At the present time, five areas of specialization within the degree programs are available: Elementary Education, Secondary Education, Reading and Language Arts, Early Childhood Education, and Curriculum and Supervision.

The Doctor of Education (D.Ed.) degree is granted in recognition of mastery of theory, practice, and research in professional education. It culminates in a dissertation that should make a significant contribution to professional knowledge, or that should show that the student can effectively interpret and disseminate knowledge already available. The dissertation may take the form of the development and evaluation of a major curricular work (text, guide, film, bok, etc.) that results from the student's studies and research.

The Doctor of Education degree in Curriculum and Instruction is best suited to those who want to work primarily at the practitioner's level in professional education: with classroom teachers, as curriculum consultants and supervisors at the district and state levels, or as college and university teachers with primary emphasis on practical teaching concerns such as teaching methods courses and supervising student teachers.

The Doctor of Philosophy (Ph.D.) degree in education is granted in
recognition of mastery of knowledge in a specialized subject or subject field. It culminates in a dissertation that should demonstrate an original scholarship, and that demonstrates an ability to advance professional knowledge significantly through the use of research tools.

The Doctor of Philosophy degree in Curriculum and Instruction is best suited to those who wish to work primarily at the research and development levels in professional education: planning and supervising research at the university and laboratory level, teaching advanced and theoretical courses in curriculum and instruction, or administering programs that are essentially research-oriented.

Both degrees require the student to complete the equivalent of at least three years (normally 135 to 155 credit hours) of full-time study beyond the baccalaureate degree. A minimum of three consecutive terms must be spent on the University of Oregon campus. Frequently, the student's planned academic and research program is such that a longer consecutive period of on-campus residence is advised.

## Application for Admission :

Basic application procedures are the same as those for admission to Master's degree programs in Curriculum and Instruction (see page 249). In addition, the following are required to be submitted to the Graduate Student Records Office in the College of Education:
(a) Record of score on the Miller Analogies Test, or on the Graduate Records Examination. If the latter is selected, only the Aptitude Test need be taken. Test scores should be sent directly to the Graduate Student Records Office from the testing service. The Counseling Center at the University of Oregon can administer these tests, if they have not been taken elsewhere.
(b) Four letters of recommendation, including two from persons associated with the applicant's work, one of whom should be the immediate supervisor in the applicant's present or most recent position. The remaining two letters should be from persons best able to judge the applicant's scholastic ability. Letters of recommendation should be sent directly to the Graduate Student Records Office.
(c) A completed application form for admission to the Area of Curriculum and Instruction. This form may be obtained from, and should be sent to, the Graduate Student Records Office.
(d) Evidence of scholarly performance. Evidence of ability to organize materials and to express oneself in clear, concise written form is required and may include published articles, master's theses, term papers, and reports of studies completed. Send these materials to the Graduate Student Records Office, College of Education. Clearly mark the materials as part of the materials required to be submitted for consideration for admission to the doctoral program. Enclose a self-addressed stamped envelope for the return of these materials.
(e) Language Proficiency. If the applicant's native language is not English, the Test in English as a Foreign Language (TOEFL) must be taken. A superior rating on this test must be obtained to be considered for admission to doctoral study in the Area of Curriculum and Instruction.

## Selection of Candidates:

The number of persons admitted to study in doctoral programs administered by the Area of Curriculum and Instruction is limited. Factors considered in selecting those admitted include the following:
Age. The candidate should be able to complete requirements for the degree at an age that allows an adequate period of post-degree service.
Personal Qualities. The candidate should have demonstrated personal qualities and characteristics that are expected in leaders in education. People writing references for candidates are asked to comment on such traits as appearance, poise, emotional stability, and social adjustment.
Academic Background and Scholarship. The candidate should be able to write and to speak with clarity, accuracy, and effectiveness.
Experience. The candidate should have had sufficient successful first-hand experience in the area in which the doctoral work is planned to demonstrate an ability to function effectively as a leader in that field.
Purpose. The candidate should be able to express his or her purpose in pursuing a doctoral program in clear and concise terms.
Placement. The candidate should have a high probability of being placed in a position in the area of specialization after the completion of the degree program.

All applications for admittance to the doctoral program in the Area of Curriculum and Instruction are con-
sidered by an Admissions Committee during the winter term of each year. Applicants will be notified of the commintee's decision in mid-Marcl. It is the applicant's responsibility to see that his or her own file is complete and ready for review by early February. Consult the Graduate Student Records Office (503-686-3527) for information concerning the status of an Admissions File.

## Financial Assistance:

An applicant for admission to a progran of studies administered in the Area of Curriculum and Instruction wanting to apply for a graduate assistantship should request the appropriate forms from the Graduate Student Records Office, College of Education. The number of assistantships is limited, and it is usually late spring before the number available is known. Applications for graduate assistantships should be filed by February 1.
Applicants interested in apply for fellowship awards offered by the University should request information and application forms from the Graduate School of the University. Information regarding state scholarships covering tuition and fees and application forms are available from the Committee on Scholarships and Grants in Aid. Loan applications are made through the Director of Financial Aids.

## Planning the Degree Program:

Students admitted to the doctoral degree program in Curriculum and Instruction will be assigned a tentative adviser at the time of notification of admission. The tentative adviser will assist the student in initial program planning and upon mutual agreement, may become the student's permanent adviser. The relationship between the student and the adviser is viewed as the primary relationship for program planning and advising for progression through the program. The permanent adviser usually chairs the student's dissertation committee.
The student and adviser will develop a tentative program of studies leading to either the Ph.D. or Ed.D. degree. The proposed program will be presented for review to a committee composed of the adviser, two faculty members from the student's area(s) of emphasis and one advanced doctoral student in the appropriate program area.

The primary purposes of the committee review are: (1) to evaluate the student's proposed program in terms
of academic background and professional goals and to recommend any appropriate changes; (2) to certify that the student's program meets the published requirements of the area.

Approved doctoral programs must be filed prior to the end of the student's third term of attendance following admission to work toward the degree. Although the student may complete two terms on campus prior to filing the program, the residence requirement for the degree cannot begin prior to the tern in which an approved program is filed.

Certain research or other tool requirements, or both, are dependent upon whether the student elects the Ph.D. or D.Ed. option.

Credits from other approved institutions may be transferred to the student's doctoral program at the University of Oregon under the following conditions: (a) the courses must be relevant to the degree program as a whole; (b) the courses must be approved by the Area; (c) the grades earned must be A or B or equivalent; (d) no more than twothirds of the required credit in any primary or supporting area taken at another institution may be applied toward the degree requirements.

After a student has been admitted to the degree program, no work that is to be applied toward the doctoral program nlay be taken off-campus except with prior approval of the candidate's adviser.

## Residence at the University of Oregon:

The three-term consecutive residence requirement can be met only subsequent to the development of the program for the doctorate, the approval of this progran by the adviser, and the formal submission of the program to the Graduate Student Records Office. The term in which the program is submitted is counted. To satisfy this requirement, a student must be enrolled for at least 9 credit hours per term.

It is desirable that the last year before receiving the degree be spent on campus. This enables the student to be on campus with ready access to the library, the adviser, and dissertation advisory committee during the writing of the dissertation.

## Doctoral Dissertation Committee :

This committee, in accordance with Graduate School policy, is composed of at least three members of the graduate faculty of the College of Education and one member of the University of Oregon faculty not affiliated with the College of Education. The student's
adviser usually chairs this committee. One of the two remaining College of Education members is recommended by the Associate Dean of the Division in which the candidate is a student. The Associate Dean will make such a recommendation after reviewing the student's dissertation proposal. The student's dissertation proposal must be formally approved by the members of the Dissertation Commitee. Planning for the dissertation should begin as early in the program of doctoral studies as possible. A minimum of 18 term hours must be devoted to the dissertation

One or moret comprehensive examinations will be required depending upon the student's primary and supporting areas. Comprehensive examinations may not be taken until all or almost all of the required course work has been completed. Students may not be advanced to candidacy for the degree until the dissertation proposal has been accepted and comprehensive examinations successfully completed.

The student's Dissertation Committee must formally approve the dissertation prior to the required oral defense of the Dissertation by the student, which also must be deemed satisfactory by the Committee.

Students should consult the Graduate Student Records Office in the College of Education for detailed information regarding requirements for doctoral degree program in Curriculum and Instruction, and the University Graduate School regulations for additional information.

## The University of Oregon Resident-Teacher Master's Degree Program: Field Centered

The Resident Teaching Program combines graduate study with a year of full-time teaching in a public school under the direction of jointly appointed school district and College of Education faculty. Successful completion results in awarding of a master's degree through the College of Education. The program provides opportunity to relate educational theory and classroom practice, and develop personal teaching skills through cooperative planning and supervision in an on-the-job field setting. Program participants are placed in elementary or secondary schools in one of the cooperating school districts which include Amity, Eugene, Fern Ridge, Oregon City, Roseburg, Springfield, South Umpqua (Myrtle

Creek area), Crow-Applegate, Sandy, and Junction City.
Time Commitment: Program participants spend an initial term of study consisting of a six-credit, three- to fourweek seminar-workshop on campus prior to the public school year. During the school year, resident teachers participate in additional required seminars and workshops, conducted in the local setting, carrying credit toward the degree. The final term of study consists of an on-campus term.

Clinical professors on joint appointment between the district and the College coordinate the program in each area, provide graduate instruction, and assist cooperating school district personnel in supervising program participants.
Program Advantages: The resident teacher has a contract with the school district, receives two-thirds of the district's base salary, combines graduate study with actual classroom situations, receives special services of University and district personnel to improve teaching competence, and earns a master's degree upon successful completion.
Qualifications for Admission: Selection of resident teachers is based on the following criteria: (1) eligibility for admission to the Graduate School; (2) possession of an Oregon Teaching Certificate prior to begining of the school year; (3) appropriate subject matter and professional education background; (4) a high degree of commitment to teaching as a professional career as determined by references, conference, and interview.
Responsibilities: Resident teachers pay graduate tuition each term, maintain graduate level academic standards, and fulfill contractual agreements with a school district.

## Field-Centered Courses:

A three to four-week seminar-workshop in August:
CI 507. Communication Skills: Teachers and Learners.

[^2]Application: Persons interested should request an application for the resident TEACHER PROGRAM from the Office of Field Experience Programs, Education Annex, College of Education, University of Oregon, Eugene, Oregon 97403.

## Undergraduate Courses

CI 199. Special Studies. 1-3 credit hours.
Special Study Skills. Independent study and field work. Student and instructor determine specific purpose, content, and requirements to meet individual needs. Consent of instructor is required. Sparks.
CI 200. SEARCH. 1-3 credit hours.
CI 314. Teaching Strategies. 2 credit hours. Study, analysis, and practice of generic strategies used frequently by teachers irrespective of subject area or level of instruction. Strategies examined represent a range on a continuum from directive-expository to nondirectiveheuristic and include : lecture, discussion, discovery, independent study, and experiential. Some attention to levels and patterns of questioning, response elicitation, behaviors to facilitate student inquiry, and development of basic communication skills, essential to building trust relationships in classroom. Prerequisite : upper-division and graduate standing. Acheson, Arends.
CI 333. Teaching Mathematics in the Elementary School. 3 credit hours. Mathematical concepts and their relationship to the basic context of elementary school mathematics programs. Critical analysis of commercially prepared curricular materials. Skill and experience with techniques and procedures representative of teaching in elementary school mathematics.
CI 334. Teaching Social Studies and Language Arts. 5 credit hours. Emphasis on the structure and process of social studies; identification of social studies and language arts objectives; development of units, lessons, teaching models and inquiry skills; devising evaluation procedures and techniques. Emphasis on language as a means of thinking and communicating, organizing and improving programs of instruction in listening, oral and written communication; evolution of learning materials, equipment, and resources. Prerequisites : Instructional Assistantship or consent of instructor. Nye, Miller.
CI 335. Teaching Reading in the Elementary School. 3 credit hours. An introductory course concerned with the nature of the reading proces. Theory and practice in word recognition, comprehension, assessment, teaching strategies, instructional materials, and program implementation. Concurrent practicum required. DeHaven and Jackson.
CI 336. Teaching Science in the Elementary School. 3 credit hours. Emphasis on teaching the processes of science; ways of using district, state, and nationally developed programs in planning instruction for children; using instructional media, methods of presentation, appraising the attainment of objectives. Prerequisite : Instructional Assistantship, or consent of instructor. Sylwester.
CI 400. SEARCH. 1-3 credit hours.
CI 405. Reading and Conference. Credit hours to be arranged.
CI 407. Seminar. The following seminar topics are offered with credits as noted. Other topics and credit hours may be arranged with staff members.
Elementary Student Teaching. 2 credit hours. For elementary student teachers, this
seminar offers opportunity for sharing of ideas, and cooperative problem solving. In addition, public school personnel present information relating to job interviewing, classroom management, group process deci-sion-making, etc. Attendance required. The seminar serves to maintain communication between the student in the field setting and the University. Taken concurrently with CI 415 Student Teaching, Elementary. Pass/ No-Pass only.
Instructional Assistantship. 2 credit hours. For elementary instructional assistants, this seminar offers opportunity for sharing of ideas, cooperative problem solving, and input relating to teaching strategies. The seminar serves to maintain communication between the student in the field setting and the University. Taken concurrently with CI 409 Elementary School Instructional Assistantship. Pass/ no-pass only.
Secondary Student Teaching. 1 credit hour. To be taken concurrently with CI 417 Secondary Student Teaching. Pass/No-pass only. ESCAPE I Tutor/Volunteer Training. 1 credit hour. Shared experiences, problem solving, resource identification, and field communication skills are explored within the context of basic core curriculum that facilitates the helping role involved with ESCAPE IV practicum.
ESCAPE II. Research and Design Team.
1-5 credit hours. Concentrated work for twelve hours each week to plan, design, and review curriculum for ESCAPE trainee seminars. Prerequisite: ESCAPE I, IV.
ESCAPE III. Leadership Training. 4 credit hours. Training and course credit for all ESCAPE coordinators in the program. This seminar stresses group process skills, provides training in public school supervision, and allows participants to develop public relations skills with school faculties and administration. An opportunity to lead a peer seminar in basic communication skills is also available in this course. Prerequisite :
ESCAPE I, IV.

## CI 408. Special Secondary Methods. 3

 credit hours.Secondary Methods Mathematics.
Secondary Methods Speech and Theater.
Secondary Methods Social Studies.
Secondary Methods English.
Secondary Methods German.
Secondary Methods French.
Secondary Methods Spanish.
Secondary Methods Science.
Note: Other special methods courses are offered within respective departments.
CI 409. Practicum. The following practicum topics have been arranged with credit hours as noted. Other topics and credits may be arranged to suit individual needs. All practicum work is graded Pass/No-Pass only. Pre-Student Teaching. Credit hours to be arranged.
ESCAPE IV. Tutoring/Volunteering. 1-9 credit hours. Course credit for all tutoring work in the field. Includes required attendance at opening workshop, three reports to leaders, an individual field project, regular attendance in the field. Credit for more than 5 hours must be petitioned. One term of ESCAPE I required for undergraduates concurrent with enrollment in ESCAPE IV. Pass/no-pass only.
September Experience. 2-3 credit hours. Practicum for elementary or secondary preservice teachers involving placement in public school prior to beginning of University term. Public School. Credit hours to be arranged. Elementary School Instructional Assistantship. 12 credit hours. Exploratory and
skill-development experience for the student enrolled in elementary teacher education. Fulltime practicum in the public school; opportunity to analyze the role of the teacher; study the organization of resources, time, materials, behavior, and learning; observe, and interact with children, parents, school staff, and the community; examine the total classroom environment. Introductory course in reading is taught concurrently. Prerequisite : Admission to program.
CI 415. Student Teaching: Elementary Grades K-9. 5-15 credit hours. Opportunity to combine knowledge and theory with classroom techniques and procedures with the direction of a cooperating teacher and the University supervisor. Must be taken concurrently with CI 407 Seminar : Elementary Student Teaching. Prerequisite: Instructional Assistantship. EPsy 321, 322, CI 335, departmental clearance. Pass/No-Pass only. CI 417. Student Teaching: Secondary Grades 5-12. 5-15 credit hours. Opportunity to combine knowledge and theory with classroom techniques and procedures with the direction of a cooperating teacher and the University supervisor. Must be taken concurrently with CI 407 Seminar : Secondary Student Teaching. Prerequisite: Pre-Student Teaching Practicum; EPsy 321, 322, Special Secondary Methods, departmental clearance. Pass/No-Pass only.

## Upper-Division Courses <br> Carrying Graduate Credit

CI 405. Reading and Conference. (G) Credit hours to be arranged.
CI 407. Seminar. (G) The following seminar topics may be scheduled with credits as noted or arranged to fit individual requirements.
Alienated Youth. 3 credit hours. Explores and analyzes those factors that create and maintain conditions of alienation within the public school system. Poole.
Creative Expression for the Gifted Young Child. 3 credit hours. The nature of creative learning ; conditions that facilitate and inhibit creative growth; examination of important principles of creative teaching; devising organizational designs, methods, and instructional resources; developing evaluation procedures and techniques for assessing and rewarding of the young gifted child. Nye.
Instructional Product Design: Instructional Sound Slide Programs. 2-3 credit hours. Development of instructional sound slide programs and packages for independent study, small group work, or instructional settings where this medium is useful in facilitating learning. Students are involved in the total process from developing a needs assessment, pre-production planning, to the development of the final product. Prerequisites: CI 435 (G) Educational Media, or Media Technology Laboratory, or Art 493 Visual Continuity, or previous experiences with photographic materials. Instructor's consent required. Ferrington.
Instructional Product Design: Designing Overhead Projection Materials. 2-3 credit hours. Advanced preparation of overhead projection materials including Kodalith transparencies. diazo materials, and other related processes. Instructor's consent required. Leonard.
Instructional Product Design: Large Group Multi-Image Presentations. 2-3 credit hours. The design and development of multi-screen, multi-image large group programs. Prerequisites: Instructional Slide Programs or equivalent experience. Instruc-
tor's consent required. Ferrington.
(Students enrolling in the above three seminars are encouraged to have taken or to take simultaneously Art 408 (G) Drawing for Scenario.)
The Metric System of Measurement: Its Theory and Research. 3 credit hours. Concrete experiences with metric S I units of length, area, volume, capacity, mass, and temperature. General overview of the history, rationale, and theory of metric units. Lamon.
Mathematics for the Gifted Child. 3 credit hours. Curriculum and methods of instruction for academically talented children; development of enrichment units and source materials for teachers.
Problems and Issues in Community Education. 3 credit hours. Utilizes a multi-disciplinary approach to the analysis of contemporary issues related to the community school. Special emphasis will be given to review of new literature and research in the field. Course format will be determined by emerging developments in Community Education, i.e. legislation, evaluation, goals. Prerequisite : CI 491, or consent of instructor. Santellanes.
Problems of Minorities in Schools. 3 credit hours. Identification and examination of problems and issues encountered by ethnically and culturally different minority children in the public school system ; i.c., institutional racism, teacher expectations and attitudes, biased textbooks, mono-cultural curriculum, ability groups, educational assessment, and socio-cultural conflict between the ethnically different community and the public school community.
Ecology of Struggle. 3 credit hours. Examination of the factors and conditions which manifest themselves in humanity's eternal struggle with the environment; study of areas of ecology and other problems faced by the middle class and the poor in their struggle for survival.
CI 409. Practicum. (G) The following topics are arranged with credits as noted. Other topics and credits may be arranged to fit individual requirements. All practicum work is graded Pass/No-Pass only.
Public School. Credit hours to be arranged. Reading in the Public Schools. Credit hours to be arranged.
CI 420. The Student Council in the Secondary School. (G) 3 credit hours. Aims and objectives of the student council movement; types of organization; leadership development ; council relationship problems ; evaluation of the student council program. Not offered 1978-79.
CI 427. School Activities. (G) 3 credit hours. Principles and purposes of school activities; pupil participation in school government; assemblies; clubs, social activities; athletics, speech activities, drama, music, publications; evaluation of the school activity program. Not offered 1978-79.
CI 428. Psychology of Reading Instruction. (G) 3 credit hours. Nature of the reading process; factors of learning and development related to reading achievement ; psychological foundations of methods and materials of reading instruction; nature and treatment of reading disability. Robeck.

## CI 431. Teaching Reading in the Primary

 Grades. 3 credit hours. The nature of the reading process as it relates to beginning reading; continues study of the topics introduced in CI 335 including further exploration of word recognition instruction, comprehension instruction, diagnosis and assessment, materials, instructional procedures, classroom organization, and program implementation ; analysis of various approaches to teach-ing beginning reading and analysis of reading readiness skills and instruction. Prerequisites CI 335 and field experience.
CI 432. Teaching Reading in the Intermediate Grades. 3 credit hours. Furthers understanding of reading at the intermediate grade level; expands knowledge and abilities in the areas of word recognition, comprehension, reading in the content areas, recreational and self-guided reading, instructional materials, diagnosis, program implementation, and classroom organization. Prerequisite : CI 335 and field experience. DeHaven. CI 433. Individualized Reading in the Elementary School. 3 credit hours. Designed to develop clear conceptualizations of the modes of creative teaching currently in use in individualizing reading instruction in elementary schools. Analysis of programs with regard to diagnostic procedures, teaching strategies, material selection and organizational patterns for effective instruction. Prerequisite: CI 335 or equivalent. Jackson. Not offered 1978-79.
CI 435. Educational Media. (G) 3 credit hours. The selection, evaluation, and utilization of instructional resources. Design and development of visual and audio materials such as overhead transparencies, simple teaching graphics, sound slide presentations, print duplication, heat process mounting, audio and video recording. Basic mediaware operation. Use of media resources in designing learning experiences. Prerequisite : upperdivision standing. Recommended for noneducation majors in telecommunications, film studies, graphics, recreation, business.
Ferrington.
CI 436. Media in Secondary School. (G) 2 credit hours. Design and production laboratory of nonprint educational materials for secondary-level teaching. Processes explored include : audio-recording, video-tape recording, heat process materials, overhead transparencies, photographic slides, and visual display methods. Prerequisite : upper-division standing.
CI 441. Individualized Instruction in the Kindergarten. (G) 3 credit hours. Observation of learning abilities in four- and five-yearold children ; teaching strategies which focus on association learning, conceptualization, and creative self-direction; organization of the program for individual learning; critical evaluation of instructional levels.
CI 451. Early Childhood Education. (G) 3 credit hours. Examination of trends and innovative programs; formulation of objectives ; organization of curricula, methods, resources, learning environments ; study and development of evaluation procedures and devices for ages 3-7. Prerequisite: EPsy 321, 322,323 , or consent of instructor. Nye. CI 469. Teaching Reading and Writing in the Secondary School. (G) 3 credit hours. Advanced topics in developmental and corrective reading programs ; emphasis on methods, materials, and organization, with applications to writing skills. Hesse, Bullock.
CI 484. The Junior High School. (G) 3 credit hours. Origins and functions of the junior high school; characteristics and needs of the early adolescent ; administration of the junior high school; curriculum and instruction ; guidance ; school activities ; evaluation.

## CI 491. Basic Concepts of Community

 Education. (G) 3 credit hours. Philosophy of community education and the community school concept ; historical and legal basis of community education; roles; relationships; organizational structures; developmental processes ; national development; goals; financial requirements ; staffing patterns; andfacilities. Prerequisites: upper-division or graduate standing. Horyna.
CI 492. Organization and Operation of the Community School. (G) 3 credit hours. A practical, in-depth exposure to the commu-nity-school approach, including its general organizational structure and procedures for allowing it to function. Alternative approaches to organization, staffing, governance, community analysis, reporting, role definition, training, program development, supervision, funding, publicity, community-involving techniques, and evaluation. Prerequisites : upperdivision or graduate standing and CI 491 or consent of instructor. Horyna.
CI 493. Utilizing Community Resources.
(G) 3 credit hours. Exploration of the multitude of existing community resources for learning, and how they may be effectively integrated into existing educational programs. Emphasis on resource identification; recruiting and screening skills, evaluation; reward systems for volunteers; supervision; and training and utilization of nonprofessionals in a community-school setting. Prerequisites: graduate or upper-division standing.

## Graduate Courses

CI 501. Research. Credit hours to be arranged. No-grade course.
CI 503. Thesis. Credit hours to be arranged. No-grade course.
CI 505. Reading and Conference. Credit hours to be arranged.
CI 507. Seminar. The following seminar topics may be offered with credit hours as noted. Other topics and credits may be arranged to fit individual requirements.
Current Topics in Education. 2 credit hours.
Models of Teaching. 3 credit hours. Harris. School Improvement and Change I and II. 3 credit hours each. Arends.
Values and Moral Education. 3 credit hours. Hersh.
Curriculum for the Gifted Child. 3 credit hours. Robeck.
Problems in Teacher Education. 3 credit hours. Harris.
Designing Educational Research. 3 credit hours. Gall.
Advanced Curriculum and School Improvement Strategies I and II. 3 credit hours. Arends.
Classroom Observation and Conferences. 3 credit hours. Acheson.
Current Research in Reading. 3 credit hours. Bullock.
Analysis of Teaching. 3 credit hours. Acheson.
Educational Development. 3 credit hours.
Poverty Solutions. 3 credit hours.
Acheson.
Introduction to Instructional Systems Technology. 4 credit hours. Ferrington. History of Reading. 3 credit hours. . Bullock.
Administration and Evaluation of Reading Programs. 3 credit hours. Hesse.
Mass Media and Curriculum. 3 credit hours. Sylwester.
Program Evaluation. 3 credit hours.
Supervision of Student Teaching. Credit hours to be arranged.
Teaching Algebra in the Secondary
Schools. 3 credit hours. Schaaf.

Advanced Seminar in Community Education. 3 credit hours. Utilizes the settings of community schools in approaching pertinent issues being faced by practicing community educators. Emphasis on staff relationships: integrating Community Education with the regular K-12 program; working with citizens' groups; facilitating other agencies; staff development ; management; and funding of special programs. Prerequisite : CI 491 or consent of instructor. Santellanes.
CI 508. Workshop. Credit hours to be arranged.
CI 509. Practicum. Credit hours to be arranged.
College Teaching.
Evaluation Laboratory.
Internship in Community Education.
Marginal Youth.
Public School.
Teaching Disadvantaged.
Coordinated Reading Programs.
Guided Field Experience.
CI 510. Experimental Course. Credit hours to be arranged.
Management of Instructional Technology
Resources. 3 credit hours. Management of instructional technology resources in higher education, business, industry, or other situations involving the administrative process in mediaware, software, and the development of learning resources. Emphasis upon budgeting, human resources, selection and evaluation of mediaware, and administrative tasks. Instructor's consent required. Nelson.
Instructional Development Projects. 3-9 credit hours. Field-based experience in which the student is involved as a para-professional in the field of instructional technology. Each individual works with a contact person in the field and is responsible for developing a project in conjunction with the contact person. This course experience is restricted to instructional technology study students and instructor's consent must be obtained. Ferrington.
Media Technology Laboratory. 2 credit hours. Provides experiences for first term instructional technology graduate students who need to develop basic technical competence. Course content dependent upon survey of student needs. Instructor's consent required. Ferrington.
CI 522. Secondary-School Curriculum. 3 credit hours. Overview of the secondaryschool curriculum, with emphasis on the various subject fields; organization of the school for curriculum development ; educational objectives ; the course of study ; evaluation of the secondary-school curriculum.
CI 530. Comparative Primary Education. 3 credit hours. Comparative study of significant and distinctive programs for primary education as evolved by Montessori, Soviet Union, Israeli Kibbutz, and the British Infant Schools. Focus is on individual and societal needs as expressed in early education. Prerequisites: graduate standing and teaching experience. Robeck.
CI 534. Science in the Elementary School. 3 credit hours. The place of science in the elementary school with particular reference to the value of science in the lives of children. Selecting and organizing content ; coordinating science with elementary-school activities; methods and materials ; rooms and equipment. Sylwester.
CI 535. Social Studies in the Elementary School. 3 credit hours. Social education objectives ; children's social problems ; unit development; work-study skills; organization of the program; materials ; research findings basic to the social education of children. Miller. Offered summer session 1979.

CI 536. Language Arts in the Elementary School. 3 credit hours. Role of language arts in the elementary-school program ; objectives; research findings on language development ; the teaching of spelling, writing, and speakinglistening skills; newer instructional materials; testing and evaluation. DeHaven.
CI 537. Reading in the Elementary School. 3 credit hours. Nature of the reading process, objectives, organization of a desirable reading program; reading-readines, reading skills; procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. Prerequisite: CI 335, or consent of instructor. Jackson.
CI 538. Mathematics in the Elementary School. 3 credit hours. Number abilities needed by children; research findings in mathematics education ; designing number experiences ; theories of teaching, desirable teaching procedures, selection and use of materials. Lamon. Not offered 1978-79.
CI 541. Cognitive Development of the Child. 3 credit hours. Review studies on conceptualization in children; Piaget's theory of cognitive development ; practice in PiagetInhelder interview techniques; design of learning strategies for early childhood education. Robeck.
CI 542. Affective Development of the Child. 3 credit hours. Emotional and social growth from infancy through the latency period; implications for family and school education in early childhood. Erik Erikson's stages of affective development are traced to contemporary theories of motivation, acculturation and social interaction. Robeck.
CI 543. Survey of Research in Early Childhood. 3 credit hours. Sources of scientific knowledge about infants and children; evaluation of previous investigations; organization of research summaries; manuscript form. Prerequisites: CI 541, CI 542, and consent of instructor. Robeck.
CI 553. Elementary School Curriculum. 4 credit hours. Functions of the elementary school ; rationale for changing the elementary school curriculum ; key components of new elementary school curriculum designs; conceptual structures used when planning for instruction ; significant developments in the instructional areas; assessing instructional programs ; continuing and emerging issues, challenges, and predictions associated with the education of children. Sylwester.
CI 565. Curriculum Foundations. 4 credit hours. Examines curriculum decisions, curriculum design and instructional organization patterns from the perspective of variouus social, philosophical and psychological positions. Issues and innovations are analyzed to determine underlying assumptions. Suttle.
CI 566. Curriculum Construction. 4 credit hours. Curriculum construction considers the process whereby curriculum decisions and change are made in a school or school system. Topics considered include needs assessment, goal setting, problem solving, management of group involvement, utilizing resources and consultants, and evaluation as they relate to making curriculum decisions. Suttle.
CI 567. Curriculum Materials. 4 credit hours. Effective use and organization of curriculum materials; text and reference books, supplementary pamphlet materials, films and slides; records and recordings, pictures, radio ; programmed learning; techniques of unit construction. Gall.

CI 571. Junior High-School Curriculum. 3 credit hours. Instructional programs appropriate for the early adolescent years; with emphasis upon the various subject fields. Not offered 1978-79.
CI 574. School Supervision. 3 credit hours. Focus upon the improvement of instruction; viewed from all per spectives : the school as an organization, the school staff, and the instructional program. The function of instructional leadership in improving, through cooperative efforts, the teaching-learning situation. Prerequisite : Either teaching and/ or administrative experience or both. Suttle.
CI 592. Reading and Its Application in the Content Areas. 3 credit hous. For practicing teachers in the secondary school (grades 7-12) from all subject endorsement (norm) areas (art to social studies). Meets the certification requirement in reading for secondary standard certification. Allows practicing teachers to:
(1) explore theory and research in determining what is comprehension, what a pupil needs to do in order to comprehend, and what a teacher should accept as evidence that comprehension has taken place; (2) describe, acquire, and make a commitment to the use of two competences needed to assist pupils in comprehending what they are asked to read; and (3) develop an instructional sequence that could be used to assist a poor reader in reading a given reading selection. Hesse.
CI 593. Methods in Secondary-School Language Arts. 3 credit hours. Review of research in the problems of teaching language arts in the secondary schools; observation and participation in demonstration teaching of literature, grammar, and composition. Designed for administrators and supervisors, as well as classroom teachers. Prerequisite : teaching experience, or consent of instructor. Not offered 1978-79.
CI 594. Methods in Secondary-School
Mathematics. 3 credit hours. Development of proficiency in the use of the problem-solving approach to the teaching of topics in arithmetic, algebra, geometry, and advanced highschool mathematics; other methods of teaching topics also discussed. Problem-solving approaches include the study of the heuristics of discovery and a laboratory approach to instruction; discussion of class memibers' experience in teaching secondary mathematics. Prerequisite : teaching experience. Not offered 1978-79.

## CI 595. Methods in Secondary-School

Science. 3 credit hours. Selection of materials for secondary-school science teaching, demonstrations, science-test construction, instructional devices; use and care of microscopes, meters, and other equipment. Prerequisite: teaching experience, or consent of instructor. Hull. Not offered 1978-79.
CI 596. Methods in Secondary-School Social Studies. 3 credit hours. Facilitating learning in social studies classrooms; review of recent developments in curriculum materials and teaching; teaching which promotes inquiry is discussed, illustrated, and practiced. Students may work on problems of individual interest, and prepare materials for use in junior and senior high-school classes. Prerequisite: teaching experience, or consent of instructor. Not offered 1978-79.

## Special Education Area

Wayne D. Lance, Ed.D., Area Coordinator, Professor of Education (special education). B.A., 1953, M.A., University of Redlands, 1960 ; Ed.D., Peabody, 1964.
Anita Archer, M.Ed., Instructor in Education (mildly handicapped). B.A., 1969, M.Ed., 1970, Washington.
Barbara D. Bateman, Ph.D., Professor of Education (learning disabilities). B.S., Washington, 1954 ; M.A., San Francisco State, 1958; Ph.D., Illinois, 1962 ; J.D., Oregon, 1976.
Wesley C. Becker, Ph.D., Professor of Education (culturally disadvantaged). B.A., 1951, M.A., 1953, Ph.D., 1955, Stanford.
Douglas Carnine, Ph.D., Assistant Professor of Special Education (culturally disadvantaged). B.S., Illinois, 1969 ; Ph.D., Utah, 1974. Siegfried E. Engelnuann, B.A., Professor of Education (culturally disadvantaged). B.A., Illinois, 1955.
V. Knute Espeseth, Ph.D., Associate Professor of Education (crippled and other health-impaired). B.S., North Dakota State Teacher's, 1955 ; M.S., North Dakota, 1961 ; Ph.D., Wisconsin, 1965.

Nancy Fenrick, Ph.D., Assistant Professor of Education (severly handicapped). B.A., Wisconsin, 1970 ; Ph.D., 1975, S.U.N.Y. at Stony Brook. Fay Haisley, Ph.D., Assistant Professor of Education (mildly handicapped). B.A., Papua and New Guinea, 1970 ; M.Ed., 1971, Ph.D., 1973, Oregon. Francine Holland, Ph.D., Assistant Professor of Education (special education, language for the multihandicapped). В.A., 1968, M.A., 1970, North Texas State ; Ph.D., George Peabody, 1977.
Robert H. Mattson, D.Ed., Professor of Education (special education). B.A., Montana, 1949 ; M.A., Iowa, 1950 ; D.Ed., Oregon, 1959.

James E. McDonald, Ph.D., Assistant Professor of Education (behavior disorders). B.Ed., 1966, Alberta; M.S., 1970, M.Ed., 1971, Ph.D., 1973, Oregon.
Leze B. Myers, M.D., Assistant Professor of Education (neurologically impaired). B.S., Oregon State, 1955 ; M.S.; 1960, M.D., 1960, Oregon. Gerald R. Patterson, Ph.D., Professor of Education (special education). B.S., 1949, M.S., 1951, Oregon ; Ph.D., Minnesota, 1956.
George Sheperd, Ed.D., Professor of Education (mental retardation). B.S.,

1955, M.A., 1958, Colorado State College; Ed.D., Illinois, 1965.
Nonda P. Stone, D.Ed., Senior Instructor in Education (special education, field experience coordinator). B.S., Oregon College of Education, 1945 ; M.Ed., 1955, D.Ed., 1971, Oregon. Ruth Waugh, Ph.D., Associate Professor of Education (learning disabilities). B.S., Southern Oregon, 1957 ; M.S., 1963, Ph.D., 1972, Oregon.
Greg Weisenstein, Ph.D., Assistant Professor of Education (mental retardation). B.A., 1969, M.A., Washington, 1972 ; Ph.D., Kansas, 1975.

## Faculty Emeriti

Kenneth S. Wood, Ph.D., Professor Emeritus of Education (speech pathology and audiology). B.S., Oregon State, 1935 ; M.A., Michigan, 1938 ; Ph.D., Southern California, 1946 ; at Oregon since 1942.

## Undergraduate Studies

A major in Special Education is not offered at the undergraduate level at the University of Oregon ; however, undergraduates may enroll in a wide variety of special-education courses.

It is recommended that freshman and sophomore students follow a broad liberal arts program to meet group requirements in arts and letters, social science, and science. Requirements for elementary/secondary teacher certification may be taken in addition to the sequence requirements. Students interested in immediate experiences with the handicapped may participate in volunteer programs or observation in such programs as camping, recreation, swimning, or physical education for the handicapped. Participation in these activities also may earn practicum credit at the University. Students majoring in areas outside the College of Education, such as psychology, sociology, recreation, etc., also are encouraged to enroll in courses in the area of special education.

A 12-15 credit hour sequence of courses is recommended for Curriculum and Instruction majors, as well as other interested undergraduates, which includes:

## Course, Credit Hours

SpEd 407 (G) Exceptional Child, 3
SpEd 462(G) Psychology of Exceptional Children, 3
SpEd 485(G) Behavior Management of Exceptional Children, 4
SpEd 486(G) Design of Instruction for Exceptional Children, 3

In addition any of the following may be taken:
Either
SpEd 464(G) Introduction to Mental Retardation, 3 or
SpEd 463(G) Introduction to Children with Behavior Disorders, 3 or
SpEd 466 (G) Introduction to Learning Disabilities, 3 or
SpEd 467 (G) The Physically Handicapped, 3

## Endorsement Programs

Training for Endorsement in Special Education: Current requirements for Oregon endorsement to teach in the area of special education in the public schools became effective on October 15, 1977.

The new special education endorsements are in two areas of specialization:
(1) Handicapped Learner ; and
(2) Severely Handicapped Learner. Transition to Standard Handicapped Learner Endorsement: The former Basic endorsement programs for teacher of the Mentally Retarded, Physically Handicapped, and Extreme Learning Problems are no longer offered. Studies leading to completion of the Standard endorsements in Mental Retardation, Physically Handicapped, and Extreme Learning Problems will continue to be offered. Conversion of one of the former categorical Standard norm endorsements to the new Handicapped Learner endorsement may be accomplished by completion of four courses, as follows : SpEd 485(G) Behavior Management of Exceptional Children; SpEd 486(G) Design of Instruction for Exceptional Children ; SpEd 465(G) Diagnosis of Basic Skills, and SpEd 407 (G) Communication and Counseling Exceptional Children.

## Handicapped Learner Program:

The Handicapped Learner Endorsement Program at the University of Oregon is designed to prepare teachers to work with the mildly handicapped child in a variety of classroom settings -the regular class, the self-contained special education class, and the special education resource room. The program expands on the skills and knowledge of regular classroom teachers to prepare them for systematic instruction of the handicapped.

The competency-based training program is built around a three-term sequence of practica beginning with a tutorial practicum and progressing to total organization of a classroom. Three methods classes, taken prior to the practica or concurrently, prepare
the students for work in the practica. These courses introduce the students to systematic instructional procedures in mathematics, reading, and language arts including: assessment, program planning, instructional procedures, practice procedures, program implementation, data collection, and program evaluation. In addition to the methods courses and practica, students complete four courses concerning exceptional children and their role in the school, family, and community.

In order to be eligible for the Oregon Basic Handicapped Learner endorsement, the student must have completed, or be eligible for, the general endorsement for Oregon elementary or secondary teachers and demonstrated competence, or complete 33 term hours of credit designed to develop competence, in special education.

The following practica and courses are required to qualify for the Basic HL endorsement :
$\left.\begin{array}{lc} & \begin{array}{l}\text { Credit }\end{array} \\ \begin{array}{l}\text { Course Requirements }\end{array} \\ \text { SpEd 407(G) Reading Instruction }\end{array}\right)$

To obtain the Standard HL endorsement, the student is required to complete the requirements for the Basic HL endorsement outlined above and, in addition, the student must complete the following course work and practicum hours:

SpEd 507 Role of the Resource
Consultant
SpEd 508 Practicum: Resource Consultant
SpEd Approved Electives

In order to apply for the Handicapped Learner Endorsement Program the applicant must have:
(1) An undergraduate GPA of 2.75 or successful completion of 12 graduate hours in special education (preferably course work in the Handicapped

Learner Program) with a minimum GPA of 3.00 ;
(2) completed the Graduate Record Examination (verbal and quantitative) or the Miller Analogies Test;
(3) successfully completed student teaching (Note: Teacher certification at time of application is not necessary) ;
(4) undergraduate, pre-master's, master's, or post-master's status at the University of Oregon.

The applicant must be accepted into the HL Program prior to taking any of the other course work prior to entry into the program. Applicants currently without formal status (undergraduate, pre-master's, master's, or post-master's) at the University of Oregon must submit a completed copy of the Application of Graduate Admission and complete the application to the Handicapped Learner Program, available from the Graduate Student Records Office, College of Education.

## Severely Handicapped Learner Program:

The SHL Program is designed to prepare teachers to work with the severely handicapped across age levels (preschool, school age, adolescent, adult) and across primary handicapping conditions (severe retardation, multiple physical/sensory handicaps, emotional/ behavior disorders).

The SHL program consists of a minimum of 55 term hours including: (1) a series of 19 term hours taken in conjunction with students preparing to teach the mildly handicapped learner, and (2) a core of 15 term hours of course work specific to methodology and content for teaching the severely handicapped, and (3) 21 term hours of field based experience beginning with practica in direct teaching and management in individual and small group instructional settings and culminating in an internship requiring the orchestration of the entire classroom program.
Area A : Common Core-19 term hours or demonstrated competence.

| Number Course | Credits |
| :--- | :--- |
| SpEd 462(G) Psychology of |  |
| Exceptional Children | 3 |
| SpEd 485(G) Behavior Manage- <br> ment of Exceptional Cild | 4 |
|  |  |
| Counseling Skills for Teachers <br> of Exceptional Children | 3 |
| SpEd 407(G) Reading Instruction | 3 |
| for the Handicapped |  |
| SpEd 407(G) Language Arts | 3 |
| Instruction for the Handicapped | 3 |
| SpEd 407 (G) Math Instruction | 3 |
| for the Handicapped | $\vdots$ |
|  | 19 |

Area B: Severely Handicapped Learner36 term hours or demonstrated competence.
Number Course Credits
SpEd 407(G) Methods and Content
I for the Severely Handicapped 3
SpEd 407 (G) Methods and
Content II
SpEd 407 (G) Methods and
Content III
3
Content III
SpEd 407(G) EITHER Severely
Disturbed Child OR Physical Man-
agement of the Multi-Handicapped
SpEd 407 (G) Language
Acquisition of the Handicapped
SpEd 409(G) Practicum : Severely
Handicapped I
SpEd 409(G) Practicum: Severely
Handicapped II
SpEd 409(G) Practicum : Severely
Handicapped III
SpEd 509 Internship: Severely Handicapped

Overall Program Total: 55 credit hours.
In order to apply for admission to the Severely Handicapped Learner Endorsement Program the applicant must have:
(1) an undergraduate GPA of 2.75 or successful completion of 12 graduate hours in special education (preferably course work in the severely handicapped learner program) with a minimum GPA of 3.00 ;
(2) favorable recommendations from appropriate professional persons specifying previous work experience (teaching and work with the severely handicapped) and ability to handle graduate level course work;
(3) undergraduate, pre-master's, master's, or post-master's status at the University of Oregon.

Note: Applicants are not required to have: (1) a teaching certificate;
(2) Graduate Record Examination or Miller Analogies Test scores.

These application procedures should not deter otherwise uniquely qualified applicants, whose background may not meet minimum standards, from seeking exceptions.

The applicant must be accepted into the SHL Program prior to taking any of the required practica. The student may complete any of the other course work prior to entry into the program. Applicants currently without graduate status at the University of Oregon must apply for admittance to both the SHL Program and the graduate program. Application forms for graduate admission and to the Severely Handicapped Learner Program are available from the Graduate Student Records Office, College of Education.

Resource Consultant Program:
The goal of the Resource Consultant Program at the University of Oregon is to train students at the master's and
doctoral degree levels to move beyond their basic training in skills for innplementing programs for handicapped students to developing skills in the consulting and negotiating process so that they may become facilitators and resource personnel for both regular and special school personnel.

The program includes a three-course sequence designed to: (1) identify the role of the resource consultant ; (2) discuss the competences needed by resource consultants; (3) examine various types of models for support services to schools and classes; (4). develop program modules and media packages to be used with parents, school persomnel, preservice and inservice courses ; and (5) provide practicum experiences in a supervised setting for students to practice skills of personnel preparation and inservice training with teachers at the regional, state, and national levels.

Students in the Resource Consultant sequence are prepared for divergent roles, based on individual preparation and expertise. Information is both presented by the instructor and researched by students to include:

Diagnostic Skills, Instructional Skills, Progran Evaluation Skills, Management Skills, Inservice Training Skills, Interpersonal Communication Skills, and Resource Services.

It is presumed that all students entering the sequence will have had or will take concurrently course work related to: (1) Diagnosis and Prescription in the basic skills of reading, math, and language ; (2) Behavior Management techniques; (3) Psychology of the Exceptional Child; and (4) Historical and Legal Basis of Special Education (or equivalent).

The three-course sequence includes the following: SpEd 507 Role of Resource Consultant I, 3 credit hours; SpEd 507 Role of Resource Consultant II, 3 credit hours; SpEd 509 Practicum : Role of Resource Consultant III, 3 credit hours.

## Graduate Studies

Master's Degree Program in Special Education

The following information concerning the master's program is subject to change at any given time. The Area's Master's Committee is continually involved in discussions and decisionmaking in an effort to improve the program. A prospective student should consult the Area from time to time to be advised of any changes since publication of this catalog.

The major thrust of the master'sdegree program in special education is to train direct-service personnel who are able to manage effectively the teachinglearning process with handicapped children. Graduates would be competent to serve in several roles including direct instruction, inservice training, and program consultation to teachers for maintenance of children in regular classrooms.

The Area is committed to a philosophy of de-emphasizing categorical boundaries for exceptional children. Therefore, master's-degree candidates will acquire competence working with a wide variety of handicapping conditions.

The area is moving toward a competence-based program so that each graduate will be trained to meet a given set of objectives deemed essential for effective instruction, program coordination, and delivery of service to the handicapped.
Focus of the Program: All master'sdegree candidates are required to complete a common core of classes enabling them to acquire basic skills and knowledge essential to effective instruction of handicapped children. Beyond the core, a student's course work should be planned carefully in consultation with his or her adviser to provide the breadth and depth desired in acquiring the degree.

## Master's Degree Options:

Master's degree candidates have the option of working toward one of three master's degrees:

For the Master of Arts (M.A.) degree, the candidate must demonstrate proficiency in one foreign language in addition to all other requirements.

There is no foreign language requirement for the Master of Education (M.Ed.) degree. However, the candidate is required to have a valid teaching certificate and to have completed at least one year of successful classroom teaching at the elementary or secondary level.

There is no language or teaching requirement for the Master of Science (M.S.) degree.

## Application Procedures:

The procedures outlined below are designed to provide qualified students an opportunity to pursue the master's programs in an orderly and professional manner. The necessity to follow these procedures should not deter otherwise uniquely qualified applicants, whose background may not meet stated
minimum standards, from seeking exceptions.

Students interested in pursuing one of the master's-degree programs in the Area of Special Education must submit a completed copy of the Application for Graduate Admission.
(1) The green copy of the application, accompanied by one official copy of all previous college or university transcripts, and a $\$ 10.00$ filing fee must be subnnitted to: Admissions Office, P. O. Box 3237, University of Oregon, Eugene, Oregon 97403.
(2) The remaining copies of the application, two official copies of all college and university transcripts, the completed Personnel Record form, including a comprehensive statement of personal and professional goals, and three recommendations from appropriate professional sources must be submitted to: Graduate Student Records Office, College of Education, Room 111, University of Oregon, Eugene, Oregon 97403.

Recommendations from University of Oregon faculty members should be included if possible. All the forms necessary for application are available from the Graduate Student Records Office, Area of Special Education, College of Education.

Note: Attendance at a summer session does not constitute admission or acceptance in the degree program.
Application Filing Deadlines: To be considered for admission, a prospective student's file including the application, personnel record, transcripts, and recommendations must be completed according to the following schedule: Admission: Summer Session,, April 1; Fall Term, March 1; Winter Term, November 1; Spring Term, February 1.
Conditional Admission: Subsequent to each of the filing deadlines, applications will be evaluated by a Special Education Master's Degree Admissions Committee. At this time an applicant will receive either conditional admission (Class 3), pre-master's admission (Class 0), or be denied admission. It is important to note that no master'sprogram applicant will receive full graduate admission (Class 8) upon original application for study. Each student will receive notification of committee action. Upon receiving conditional admission a temporary program adviser will be made available to assist the student with initial program planning and securing a permanent adviser.
Selection Process: The general variables considered by the Admissions

Committee, for conditional admission include:
(1) Past academic record (normally, undergraduate GPA of 2.75 or above, or completion of 12 hours of successful (3.00) graduate work in special education) ; (2) Prior professional experience; (3) Professional and personal recommendations.
Full Graduate Admission: After gaining conditional admission it is necessary for the student to work with an adviser in developing and filing a program of studies.

Upon successful completion of 12 credit hours, and prior to completing 36 credit hours of a planned program, the student must request change from conditional to full graduate admission. Except in unusual circumstances, the Admissions Committee will award full graduate admission providing : (1) the student has a permanent adviser; (2) the student has filed an approved program with the Graduate Student Records Office and the Area of Special Education; (3) the student has successfully completed 12 credit hours of graded, graduate study on the campus of the Universtiy of Oregon.

Students may obtain the forms for requesting change from conditional to full graduate admission from the Graduate Student Records Office in the College of Education.
Transfer of Credit: Not more than fifteen (15) term hours of graduate work, earned as a graduate student in another accredited Graduate School, may be applied to a master's degree program. The following conditions also apply:
(1) The courses must be relevant to the degree program as a whole.
(2) The courses must have been taken for graduate credit and be recorded as such on the institution transcript.
(3) The transfer must be approved by the College of Education and the Graduate School.
(4) The grades earned must be $A$ or $B$ or Pass.
(5) The work must comply with the seven-year time regulation for completion of the program.
(6) Graduate credit is not allowed for any correspondence courses (Study completed through the Division of Continuing Education is considered transfer work.)
(7) The student must file two official transcripts for transfer courses and the appropriate form with the Graduate Student Records Office, College of Education.

Reservation of Graduate Credit:
Superior students who have taken graduate seminars and courses during their senior year at the University of Oregon in excess of all baccalaureate degree requirements may petition to apply the credit earned toward a master's degree. Such graduate credit may be earned for graded courses in which either an A or B was recorded, or for nongraded courses for which the student may present the instructor's evaluation stating that the work was of graduate quality, and the approval of the major department.

A Transfer of Baccalaureate Credit form, available in the Office of the Graduate School, must be filed not later than two terms after matriculation to a master's degree program, and not later than two years after receipt of the B.A. or B.S. degree. Such transfer of credit is limited to a maximum of 9 credit hours, and is limited to courses and seminars carrying graduate credit. Credit hours in research, thesis, reading and conference, practicums, and workshops do not qualify for transfer. Graded credit hours accepted for transfer under this provision will count in meeting the requirement of 24 hours of graded credit, but will not count toward the 30 hours residence requirement.
Residence Requirement: Thirty credit hours of graduate work must be completed in residence on campus. If less than 12 credit hours are transferred, three terms must be on campus; if 12-13 credit hours are transferred, two terms must be completed in residence on campus.
Continuous Enrollment: A graduate student who has been admitted for work toward a graduate degree is required to enroll in the University each term during the regular academic year from the time of first enrollment until the completion of all degree requirements, including the awarding of the degree. In any term in which students are using University services and facilities, they must enroll in a minimum of three credit hours of course work. Ordinarily, this work will be done in residence, but students may register by proxy for course work when, for example, they are living elsewhere while writing a thesis and sending chapters of it to an adviser for criticism.

A student may register for on-leave status when not using University facilities or placing any demands upon the faculty; there are no fees for onleave status. Leave is granted for a predetermined period of time, usually not to exceed one calendar year. An
exception is made for students who are able to pursue their master's-degree work only in the summer tern? ; these students must apply for leave for the ensuing school year. They may request extensions of leave up to but not beyond the seven-year limitation on credit earned toward a master's degree.

Failure to maintain continuous enrollment is considered evidence that the student has withdrawn from the University. Students wanting to resume study must formally apply for readmission, and must satisfy the requirements for admission in effect at the time of reapplication.
Previous Graduate Admission: A special form, Request for Permission to Re-register in the Graduate School, must be used in place of the Application for Graduate Admission by students who have previously been admitted to the Graduate School at the University of Oregon.

Any questions concerning the program, the mechanics of admissions, or the current status of a student's file, should be directed to the Graduate Student Records Office, College of Education.

## Financial Assistance :

Financial assistance in the form of stipends, fellowships, and loans may be applied for by master's students in the Special Education Area.
Stipends: A limited number of graduate stipends are available to be applied for in the Special Education Area. The stipend awardee, as a part of the training program, is assigned specific tasks in which to become involved. Application for stipends should be made concurrently when applying for admission to the graduate program.
Graduate Teaching Fellowships: Graduate teaching fellowships are generally available to doctoral level students. However, on occasion, master's level students may be placed on a graduate teaching fellowship and given the responsibility of performing a certain specific task or tasks in the Area of Special Education.
Loans: Graduate students are eligible for loans from University loan funds and from funds available under the federal student loan programs. Information regarding loans may be obtained from the Office of Financial Aid.
Application Procedures: Students interested in applying for financial assistance in the form of stipends or fellowships, may submit the appropriate form to the Area of Special Education when submitting their application for
admission. Formal application for financial assistance must be made to the department before March 1 in order to receive maximum consideration for aid the following fall term.

Financial assistance in the form of stipends or fellowships is usually limited to the academic year. Students interested in applying for financial assistance for any term during the academic year should observe the following schedule for submitting applications: Summer Session, April 1; Winter Term, November 1; Spring Term, February 1.

## Advisement :

Upon receiving conditional admission, a temporary program adviser will be made available to assist the student with initial progranı planning and securing a permanent adviser. The adviser will assist in professional decisions regarding equivalency of courses taken under differing titles, as well as substitutions and electives.

The primary responsibility for securing a permanent adviser, developing, filing, and fulfilling a program remains with the student.
Change in Adviser: Whenever the student changes advisers, he or she should complete a Change of Adviser Form (obtained from the Graduate Student Records Office), and return this form to the same office in the College of Education.
Initial Considerations in Planning the Program: Applicants may be admitted to the master's program without having qualified for a teaching certificate. However, if they want to obtain a certificate to teach and a master's degree concurrently, without previous education background, students should plan on approximately two calendar years of full-time study.

The specific education endorsements to teach exceptional children in Oregon include:
(1) MHL. This endorsement is placed on a regular elementary or secondary teaching certificate.
(2) SH. This endorsement does not require a regular elementary or secondary teaching certificate. However, this endorsement limits the person to teach only the severely handicapped. Reciprocity of this endorsement with other states is not known at this time.

## Program Requirements :

Students completing a master's degree in special education will fulfill both College of Education and Area of Special Education requirements.

## Area Requirements:

Cross-Campus: The master's degree program in special education must include work in cross-campus courses. Six term hours (graduate level) must be taken outside of the College of Education. It is recommended that these courses be taken in such areas as psychology, sociology, anthropology, recreation, physical education. Courses selected should be discussed with and agreed to, by the student's adviser.

Core Courses: All master's-degree candidates in special education must complete a common core of special education requirements. The core program in special education includes:
(1) Psychology of Exceptional Children (SpEd 462G), 3 credit hours; (2) Behavior Management of Exceptional Children (SpEd 485G), 4 credit hours.
(3) Legal Bases of Special Education (e.g., SpEd 507, Historical and Legal Bases of Special Education ; EdAd 407G, Law and the School; EdAd 407G, Student Rights; or related courses) 3 credit hours.
(4) Design of Instruction for Exceptional Children (SpEd 486G), 3 credit hours (required only of students not enrolled in a special education endorsement program).
(5) A three-course sequence in Research and Thesis: (a) Research I, Introduction to Special Education Research (SpEd 507), 1 credit hour ;
(b) Research II, Design of Special Education Research (SpEd 501), 3 credit hours; and (c) Research III (SpEd 501), field study, 3 or more credit hours, or Thesis (SpEd 503), 6 or more credit hours.

Electives: The total credits necessary to meet degree requirements for a master's in special education is 26 to 32 hours. This leaves a minimum of 19 hours for electives. These electives may be used in at least three ways:
(1) For teaching endorsement requirements; (2) For special education interest areas, such as Adult Programs for the Retarded, Career Education, Behavior Disorders, Mental Rétardation, Physically Handicapped, Learning Disabilities; (3) Teaching certificate requirements.

Credit Hours: It is strongly recommended that master's-degree programs in special education include $a$ minimum of 60 credit hours of post-baccalaureate study or the equivalent.

Master's-degree candidates who have completed 15 or more credit hours in special education as undergraduates may be able to complete a ninimum master's-degree program in special
education within a 45-credit hour program.

Master's-degree candidates who have extensive teaching experience with handicapped children may, with the consent of their adviser, plan a master's degree program of less than 60 credit hours.

## Evaluation of Master's Candidates:

The final examination for the master's degree in special education (M.A., M.S., M.Ed.) is in three parts : (1) A written comprehensive examination; (2) A demonstration of teaching or clinical competence; (3) And either an individual teaching/research project (field study) or a thesis.

## Comprehensive Examination:

The written comprehensive examination for special education will be prepared by Area core instructors and volunteer faculty. The meeting time and place for preparation will be publicly announced by the Area coordinator or appointed representative at least two weeks in advance. M.Ed. candidates may elect to request a takehome comprehensive as an alternate to taking the proctored examination. The papers will be read anonymously and independently by three readers. A rating scale will be used to evaluate students. Ratings will be compiled by a faculty representative, and the report given to the student by the adviser. The College of Education will specify the date, time, and place of each administration of the comprehensive examination ; however, students who have completed a minimum of 45 hours in course work, including all core classes (but excluding field study or thesis), may elect to write the comprehensive examination before the term they will graduate. Note: Students electing to write the comprehensive examination prior to their graduating term must accept complete responsibility for notifying the Graduate Student Records Office (in writing) of the term they will graduate. Notification must be received by the Graduate Student Records Office no later than seven days after the beginning of the student's final term. A student may retake the examination no more than three times.

## Application for Comprehensive

 Examination and Degree: During the first week of the term in which all requirements for the degree are to be completed the student must file anApplication for Completion and Final Examination with the Graduate Student Records Office, College of Education. At the same time, an Application for

Degree card should be filed with the Registrar's Office. It is required that all candidates for a degree be registered for a minimum of three term hours during the term they expect to receive the degree.

## Teaching/Clinical Competence:

The student's teaching or clinical competence will be evaluated in a practicum setting. The evaluation will be supervised by a practicum supervisor or supervisors.

## Field Study/Thesis:

The individual teaching/research project (field study) or thesis will be approved by the advisor, and a contract placed on file in the Area. This contract should include: (1) Specific objectives; (2) How the objectives will be met ; (3) Criteria for assessment ; (4) Projected time-line.

In addition to Research I and II, students electing to complete a field study must register for a minimum 3 credit hours in SpEd 501 Research; students electing to write a thesis must register for a minimum 6 credit hours in SpEd 503 Thesis.

## Student Responsibility:

The student is responsible for meeting the requirements set forth for the master's degree. In order that adequate records may be available at all times, copies of all communications pertaining to progress on the degree program and records of completion of specific requirements should be filed immediately in the Graduate Student Records Office in the College of Education.

## Critical Dates:

At the beginning of each term, the Graduate Student Records Office of the College of Education issues a Schedule of Dates for Completion of Master's Degree. Students are urged to consult a copy of this schedule especially during the first week of the term in which the student expects to complete all degree requirements.

Doctoral Programs in
Special Education
The following information concerning the Doctoral Program is subject to change at any given time. The Area Doctoral Committee is constantly involved in discussions and decisionmaking in an effort to improve the program. A prospective student should make an effort to contact the Area to be advised of any changes.

## Objective:

The primary mission of the Area of Special Education at the University of Oregon is the improvement of educational services delivered to the handicapped. The overall objective of the Doctoral Program is the preparation of leadership personnel for (a) college or university teaching and research in special education; (b) administration of state or local programs for the handicapped; or (c) clinical work with the handicapped. This preparation may lead to either the Doctor of Philosophy or the Doctor of Education degree.

## Awarding of Doctoral Degrees:

Doctoral degrees are awarded in recognition of the attainment of advanced knowledge, scholarship, and practical competence in special fields. Individual programs are planned by students with the help of faculty advisers and may provide for specialization in mildly handicapped, severely handicapped, administration, or a combination of the three areas. In addition, generalized programs in special education may be planned for the purpose of meeting a student's individual intent and interest.

## Application Procedures:

Students interested in pursuing a doctoral program in the Area of Special Education must submit to the Director of Admissions, University of Oregon, one copy of all previous college or university transcripts, and a $\$ 10.00$ application fee. In addition, the applicant must also file with the Area of Special Education:
(1) All remaining copies of the Application for Graduate Admission.
(2) One official transcript of all college work taken prior to application for admission.
(3) A brief description of background experience, including unrelated positions and those directly related to special education.
(4) A minimum of three and a maximum of five letters of recommendation, including a letter from both the last
academic adviser and the last, or current, employer.
(5) The applicant's Miller Analogies or Graduate Record Examination
(verbal and quantitative) scores.
(6) A statement by the applicant
relative to professional objectives (i.e., why the advanced degree is wanted; career plans upon completion of the doctorate).
(7) Any material (e.g., master's thesis, field project, published articles) that demonstrates the applicant's contribution to education and writing ability.
(8) A statement concerning goals for professional growth and development.
(9) Application for Admission to Doctoral Program, Area of Special Education.

All form for admission are available from the Graduate Student Records Office, College of Education.

Conditional Admission: All doctoral students accepted into the program are admitted on a conditional basis. To be considered for conditional admission, a prospective student's dossier must be completed and on file in the Area of Special Education. It is the student's responsibility to ensure that the dossier is complete according to the following schedule: Summer Session Admission, February 1; Fall Term Admission, March 1; Winter Term Admission, October 1; Spring Term Admission, January 1.

Applications will be evaluated by a Special Education Doctoral Admissions Committee as openings become available. An applicant may either receive Conditional Admission (Class 4), be denied admission, or be asked for further information. It is important to note that no doctoral program applicant will receive $F$ ull Graduate Admission (Class 9) upon original application for study. Each student will receive notification of committee action from the Area of Special Education.

## Selection:

Selection of students: Selection of students is based on this formal application which provides information on a number of variables evaluated against criteria approved by faculty and students in the Area. Decisions to accept or reject are made after a full review and discussion of all available information.

The general factors considered by the Area Admissions Committee, for conditional admission, include :
(1) Past academic record, including both undergraduate and graduate course work (normally, the minimum
expected is either an undergraduate GPA of 2.75 , or a graduate GPA of 3.0 on a four-point scale.
(2) Prior professional experience.
(3) Professional and personal recommendations.
(4) Miller Analogy Test score or Graduate Record Examination (verbal and quantitative) scores.
(5) The applicant's writing ability.
(6) Statement of the applicant's professional goals.

## Transfer of Credit:

Credits from other approved institutions may be transferred to the student's doctoral program at the University of Oregon under the following conditions:
(1) The courses must be relevant to the degree program as a whole.
(2) The courses must be approved by the student's Program Advisory Committee.
(3) The grades earned must be A or B or equivalent.
(4) No more than two-thirds of the required credit in any primary or supporting area may be transferred and applied toward the degree requirements.

After a student has been admitted to the degree program, no work that is to be applied toward the doctoral program may be taken off-campus except with the approval of the candidate's advisor.
Full Admission: To gain full admission, the student's program must be approved and signed by the advisor and members of the Program Advisory Committee (see Program Planning). The program must also be signed by the supporting Area adviser if the student has elected to pursue a supporting area. This signed program must then be filed by the adviser in the Graduate Student Records Office. At this time, the student requests from the chairman of the Doctoral Committee a change in status from conditional to full admission. If there have been any changes in the program following official filing, the student is required to file a memorandum outlining those changes with the Graduate Student Records Office in the College of Education. The memorandum is to be signed by the student, the adviser, and members of the Program Advisory Committee.

All forms for requesting change in status from conditional to full admission may be obtained from the Graduate Student Records Office, College of Education.

## Advancement to Candidacy:

Advancement to candidacy for the degree is based upon the following three criteria:
(1) Approval of the student's dissertation proposal by his or her disseration committee (see Dissertation)
(2) Successful completion of comprehensive examinations (see Examinations).
(3) Successful completion of the research tool requirements. After advancement to candidacy, a student must complete all requirements for the degree including the oral defense of the dissertation, within the next three calendar years.

## Residence Requirement:

The three-term consecutive residence requirement can be met only subsequent to the development of the program for the doctorate, the approval of this program by the adviser, and the formal submission of the program to the Graduate Student Records Office, College of Education. The term in which the program is submitted is counted. To satisfy this requirement, a student must be enrolled for at least 9 credit hours per term. It is desirable that the last year before receiving the degree be spent on campus. This enables the student to be on campus with ready access to the library, the adviser, and dissertation advisory committee during the writing of the dissertation.

## Continuous Enrollment:

Each doctoral degree student is required to maintain continuous enrollment while completing all requirements for the degree. Three classes of registration are available which meet the requirement. They are: (1) fulltime registration; (2) part-time registration, and (3) on-leave registration.

On-leave registration cards are available from the College of Education, Graduate Student Records Office. After three consecutive terms on-leave, the student must register on campus for a minimum of one term or admission will be cancelled. Failure to maintain continuous enrollment is considered evidence that the student has withdrawn from the University. Although students previously accepted who have not maintained continuous enrollment may apply for re-registration, they must satisfy the requirements for admission in effect at the time they re-register.

Graduate students on leave are expected neither to make use of University facilities nor to place demands
upon the faculty and, therefore, pay no fees during the leave period.

## Financial Assistance:

Financial assistance in the form of stipends, fellowships, and loans may be applied for by doctoral students in the Special Education Area.

## Stipends:

For the 1978-79 academic year, there are six doctoral stipends available for the students studying in the area of severely handicapped. These stipends have been awarded on the basis of need and professional achievement. All students who receive stipends will enroll in practica quarterly as part of their professional training. Practica experiences may include supervision of student teachers; assisting in teaching a class; research; etc.

Graduate Teaching Fellowships:
Special Education doctoral students may be employed in a variety of settings as graduate teaching fellows. The amount of these awards generally varies between $\$ 2,500$ for a .25 FTE to $\$ 4,000$ for a .40 FTE. Other Areas, such as the Center at Oregon for Research in the Behavioral Education of the Handicapped (CORBEH), the Center on Human Development (CHD), the Regional Resource Center and the Research and Training Center on Mental Retardation, offer GTFs to graduate students for specific projects.

## Application Procedures:

Students interested in applying for financial assistance in the form of stipends or fellowships, may submit the appropriate form to the Graduate Student Records Office, Area of Special Education, when submitting their application for admission. Formal applications for financial assistance should be made to the department before March 1, in order to receive maximum consideration for aid the following fall term.

## Loans:

Graduate students are eligible for loans from University loan funds and from funds available under the federal student loan programs. Information regarding loans may be obtained from the Office of Financial Aid.

## Temporary Adviser:

A temporary adviser is assigned to each student conditionally accepted for doctoral study. This adviser will orient the student to the program and assist with initial course planning.

## Permanent Adviser:

Once initial course planning is completed, or before, the student may want to ask a different faculty member to serve as the permanent adviser. This may be a person whose area of specialization is more closely allied with the student's program and interests. This is an acceptable procedure, but it should be done within the first two terms of the student's work as a doctoral student.

## Change in Adviser:

Whenever students change advisers, they must complete a Change of Adviser Form and return this form to the Graduate Student Records Office, in the College of Education.

## Advisory Committee:

Upon the completion of initial program-planning, the adviser and candidate nominate an advisory committee to be appointed by the area coordinator; membership includes the student's adviser and two additional faculty members from within the College of Education.

## Prograin Planning:

The program plan of an individual student is viewed as the responsibility of the student. The adviser, in relating to the student, commits area and University resources to the student's program. Aided by the permanent adviser, the student prepares a plan of study which includes a detailed description of an academic program and related activity. Preliminary thinking regarding dissertation intentions should also be articulated at this time, and the entire program supported by a detailed rationale including statements regarding the student's goals and intentions, reasons for pursuing them, and beliefs regarding relationships between such goals and the proposed academic program.

## Program of Studies:

A doctoral program is a blend of College and Area requirements and the specific academic and experience needs of the student. Programs will normally include the following elements:

The doctoral-degree programs are built around a primary area of study, and should be carefully selected with the student's professional goals in mind. A supporting area is optional, but not required. The supporting area may be selected from the primary Areas offered by any department in the College of Education, from emphases offered by the other professional schools, or from emphases offered by an appropriate
arts and sciences department. (Formal arrangements must be made for any supporting area selected.) The primary (or primary and supporting) area will normally comprise a minimum of 75 credit hours of the student's academic program.

Doctoral students complete the basic area statistics and research design requirements by successfully completing the Area's Research Design and Statistics examination.

The degree program will normally also include a careful selection of elective courses from within and without College of Education offerings. These courses should add depth and breadth to the student's understanding of his or her field, and should be supportive of the entire doctoral program. Included in this selection should be courses that deal with the educational, philosophical, historical, and psychological foundations of education.

## Core Courses:

Individual doctoral programs are designed to develop high levels of knowledge and skills related to instructional, interpersonal, evaluation, and research processes. All doctoral students are required to successfully complete a 15 -credit hour core program which focuses on exceptional children across categories with emphasis on deviant development rather than the traditional categories of handicapped. The five core seminars ( SpEd 507 ) . are: Diagnosis of the Developmentally Deviant; Education of the Developmentally Deviant ; Learning and Performance of the Developmentally Deviant; Cognitive Aspects of the Developmentally Deviant; and Rehabilitative Aspects of Developmental Deviance.

## Practicum:

All doctoral students are required to be continuously enrolled for a minimum of 3 credit hours of practicum or its equivalent each term.

## Foundations:

All doctoral students are required to include in their program at least 9 credit hours to be selected from one or more of the following areas: psychological theories and processes in education; social foundations; philosophical and historical foundations.

## Work Outside College of Education:

It is expected that a student's program will incorporate 20 to 40 graduate credit hours in cognate areas from
the natural sciences, humanities, or social sciences, or from a related professional school. The purpose of these courses is to provide a breadth of knowledge and understanding in areas related to the student's major and supporting studies. It is expected that the student will make full use of the resources of the University in the selection of these noneducation courses.

## Tool Subject Requirements for the Ph.D. Degree:

Ph.D. candidates should choose one of the following options as their tool subject. Specific courses will be approved by the student's Program Advisory Committee. Tool subject requirements cannot be used to fulfill any other doctoral requirements.
(a) A foreign language with sufficient reading and oral communicative facility to conduct research. This foreign language should be justified on the basis of the candidate's research interests and a rationale for the selection of a particular foreign language should be presented. Proficiency should be determined by a score above the 50th percentile on the Graduate School Foreign Language Test (French, German, Russian, Spanish) or by a score to be determined on some other test for other foreign languages.

Three years of college-level course work in the language concerned may be accepted in lieu of the examination, with at least a B grade in the last year's work, the last course having been completed within the last four years.
(b) A three-term sequence in computer science with an average grade of $B$ in the sequence.
(c) A three-term sequence in advanced statistics and research design with an average grade of $B$ in the sequence. The sequence will be planned and approved by the Program Advisory Committee following completion of the Area Research Design and Statistics examination.
(d) A three-term sequence in philosophy of science with an average grade of B in the sequence.
(e) A three-term sequence in linguistics with an average grade of $B$ in the sequence.
(f) A three-term sequence in lawe and education with an average grade of B in the sequence.

## Thesis:

All doctoral candidates are required to enroll for a minimum of 18 credit hours of thesis. Usually students do not enroll for more than a total of 30 credit hours of thesis. (For further information, refer to Dissertation.)

## Approval of Planned Program:

The student's planned program is signed by the faculty adviser and advisory committee. (In the case of a supporting area, the program is signed by a faculty member working primarily in that area). The approved program is then filed with the Graduate Student Records Office, College of Education.

## Introduction to Examinations:

Three written comprehensive examinations are required of doctoral students in special education. One examination encompasses the Area's doctoral core instructional offerings. A second examination covers statistics and research design. The third examination focuses on the student's emphasis area.

## Doctoral Core:

The core comprehensive examination evaluates the breadth of the student's knowledge of the research and theoretical literature in special education. The examination provides students with the opportunity to apply their knowledge to a typical professional situation and to demonstrate the degree to which they have integrated information gained from the doctoral core. The examination also allows faculty to assess the degree to which the core classes have achieved the Area's objectives.

## Description:

The examination usually consists of one to four questions. The student has from 8:00 a.m. to 5:00 p.m. of the same day to complete answers to the questions. The examination is evaluated by faculty in special education. Students are provided with a written evaluation of their performance on the exam. If a student's performance is unsatisfactory, different forms of the examination may be retaken until performance is satisfactory. The students' performance may be used by students and their advisers to facilitate program planning.

## How to Apply:

The core comprehensive is administered during the last week of winter term and the first week of summer term. Students electing to take the examination must request the administration of the examination during the first two weeks of the term preceding the term in which they wish to take the examination. Requests may be made by completing the form, Application for Doctoral Comprehensive Examinations, and returning this form to the Graduate Student Records Office, College of Education.

## Statistics and Research Design:

The purpose of the statistics and research design comprehensive examination is to evaluate minimum competence. The content of the examination includes, but is not limited to, problem conceptualization, research design, data analysis (group and individual, descriptive, inferential, nonparametric, regression, a posteriori tests) and data interpretation.

## Description:

The examination includes two parts. Part I is a take-home examination. Part II is a timed, proctored examination.

Each section of the examination is evaluated separately by a faculty committee of three. Differences in grading will be resolved in full committee meetings according to predetermined guides for achieving consensus. The examination is a pass/fail examination. Failing students are provided with a written evaluation of their performance. Students who do not pass the examination may take the examination at the next regularly scheduled offering of the exam. No penalty will be attached to repeat examinations.

## How to Apply:

The statistics and research design examination is given during fall and spring terms only, usually in mid-term. Students wanting to take the examination must request the administration of the examination, in writing, during the first two weeks of fall or spring term. Requests may be made by completing the form, Application for Doctoral Comprehensive Examinations, and returning this form to the Graduate Student Records Office, College of Education.

## Emphasis Area Examination:

Each doctoral student in special education completes a sequence of instructional experiences which define an area of emphasis within special education. The emphasis area comprehensive examination assesses the depth of the student's knowledge in the emphasis area. The nature and format of the examination is negotiated between the student and the program advisory committee. The examination is taken following completion of course work. It may be taken earlier if deemed appropriate by the student's program advisory committee. The examination is a pass/fail examination with the option of repeating the examination, if necessary.

## Selection of Dissertation Topic:

Planning a dissertation should begin as early as possible and certainly no later than the filing of the program. The student is responsible for determining the research project for the dissertation. The student then discusses this original idea with an adviser, who helps to clarify the problem and select a dissertation committee. The adviser should approve the research proposal before the dissertation committee is established. Before the student begins dissertation research, an official prospectus (dissertation proposal) must be approved by the student's adviser and dissertation committee.

## Dissertation Committee:

This committee is composed of at least three members of the graduate faculty of the College of Education and an additional member of the graduate facuty not affiliated with the College of Education who is regarded as a representative of the Dean of the Graduate School.

The candidate's department proposes the membership of the Committee to the Dean of the Graduate School, who, after approving it, officially appoints the Committee. There may be instances when appointments of one or more members of the graduate faculty from another university is appropriate. In appointing any additional members, the Dean may act either independently or in accordance with nominations submitted by the candidate's major department; such additional members may include representatives of supporting or related disciplines.

The membership of the committee should be proposed to the Dean of the Graduate School no later than six months before the date when the candidate is expected to complete the dissertation.

## Credit Hours:

The dissertation for the Ph.D. program may carry from 18 to 30 credit hours. The dissertation for all doctoral programs must carry a minimum of 18 credit hours.

## Oral Defense:

A formal public defense of the thesis on the Eugene campus is obligatory. During this public defense, the candidate will present the major ideas, findings, and results in the thesis and be subject to questions by the general public and members of the dissertation committee. The member who chairs the dissertation committee schedules the defense of thesis, with the coopera-
tion of the candidate's department and the Graduate School, at least three weeks prior to the date of the defense. A legible draft of the final thesis must be available for conmittee nembers at least four zeeeks prior to the defense of thesis. In addition, the Graduate Student Records Office requires three copies of the dissertation abstract and the proposed time and date of the defense of the thesis four weeks prior to the scheduled defense.

The candidate's dissertation committee must attend the oral defense, and all members must certify to the Graduate School that they approve the dissertation as defended. In the event that there is not a unanimous vote, a review will be conducted in accordance with Graduate Council regulations.

## Completion of Thesis:

Following the defense of thesis, but before the thesis is submitted in duplicate to the Graduate School, each member of the dissertation committee must confirm in writing approval of the final version of the thesis. In the event that the thesis fails to gain unanimous approval of the dissertation committee, it becomes the responsibility of the Dean of the Graduate School, after consultation with the student, the department chairman, and the committee, to determine the review procedure.

Copies of the thesis will not be accepted by the Graduate School unless they meet satisfactory standards of form and style. The student should obtain a copy of the Style Manual for Theses and Dissertations, available in the Graduate Student Records Office, College of Education, which defines these standards. Three copies of an abstract (not longer than 600 words) must be filed with the Graduate School at least four weeks before the date of the public defense.

## Student Responsibility:

The student is responsible for meeting the requirements set forth for doctoral degrees. In order that adequate records may be available at all times, copies of all communications pertaining to progress on the degree program and records of completion of specific requirements, should be filed immediately in the College of Education, Graduate Student Records Office.

At the beginning of each term, the Graduate Student Records Office of the College of Education issues a Schedule of Dates for Completion of Doctoral Degree. Students are urged to consult a copy of this schedule.

## General Special Education

## Upper-Division Courses <br> Carrying Graduate Credit

SpEd 405. Reading and Conference. (G) Credit hours to be arranged.

## SpEd 407. Seminar. (G)

The following seminar topics are offered with the credits noted. Other topics and credit hours may be arranged.
Exceptional Child. (G) 3 credit hours.
Introductory study for the beginning special education student or the student who does not plan to major in special education; provides an opportunity to become acquainted with the various categories of exceptionalities ; information provided on the characteristics of the handicaps as well as other implications for families and community agencies. A prerequisite for SpEd 462 (G) Psychology of Exceptional Children.

## Communication and Counseling for

 Teachers of Exceptional Children. (G) 3 credit hours. The impact of a handicapped child on the family, procedures for increasing effective communication skills, and procedures for working with parents of the handicapped.Career Education for the Handicapped Children. (G) 2 credit hours. Definitions and trends in career education for the handicapped, ways of assessing handicapped secondary students in nonacademic, adaptive areas; instructional methods, materials, and resources for providing instruction in the pre-vocational, personal-social, and daily living domains.
Direct Instruction, Reading. (G) 3 credit hours. Decoding and comprehension in the elementary grades are analyzed from the perspective of the practitioner who must carry out educational interventions. Includes prerequisite skills, rate for introducing new materials, example selection and teaching procedures, including critical teacher behaviors ; evaluation of published programs, criterion-referenced test construction, test application, and program modifications. Direct Instruction, Arithmetic. (G) 3 credit hours. Arithmetic instruction in the elementary grades is analyzed from the perspective of the practitioner who must carry out educational interventions with low performing students. Prerequisite skills, rate for introducing new material, example selection, and teaching procedures. DISTAR arithmetic is used as a sample program.
Direct Instruction, Language. (G) 3 credit hours. Language instruction in the elementary grades is analyzed from the perspective of the practitioner who must carry out educational interventions with low performing students. Topics include : prerequisite skills, rate for introducing new material, example selection, and teaching procedures including critical teacher behaviors. This knowledge is applied in the evaluation of published programs, criterion-referenced test construction, test application, and program modifications. DISTAR language is used as a sample program.
Beginning Manual Communication. (G) 3 credit hours. An introduction in acquiring and applying skills in sign language ; includes basic vocabulary needed to communicate in sign language. In-class application of skills trains both comprehension and mastery of a manual communication system for use with young children and beginning sign-language users.
Advanced Manual Communication. (G)
3 credit hours. Designed to refine basic sign
language skills; includes grammatical rules for conversational uses of sign language as it parallels English syntax. In-class application for conversational level skills. Prerequisite: Beginning Manual Communication.
Writing Individual Educational Programs (IEPs). (G) 3 credit hours. Analyzes components of IEP as required by P.L. 94-142 and provides both simulated and actual experiences in writing IEPs for handicapped learners.
Mainstreaming. (G) 3 credit hours. Historical and legal background of mainstreaming; IEPs; models of mainstreaming ; managing behavior in the classroom ; classroom adaptations for handicapped students.
Advocacy and P.L. 94-142. (G) 3 credit hours. Presents critical issues in P.S. 94-142 through mock due process hearings. For administrators, teachers, parents, and other advocates.
Handicapped in Literaure. (G) 3 credit hours. The social roles, values, and interacions of handicapped persons as seen in contemporary literature. A number of handicapping conditions will be explored through a variety of literary genre.

## SpEd 409. Practicum. (G)

The following practicum topics are offered with credits as noted. Other topics and credits may be arranged to fit individual requirements.
Education of Exceptional Children. (G)
1-6 credit hours. Practicum experiences arranged based upon individual student needs and interests.
Administration of Special Education. (G)
3 credit hours. Assignment to one or more programs for practical experience in one or more aspects of administration-supervision. This may be working with a project, supervising student teachers, or working in a district.
Direction Instruction. (G) 3-6 credit hours. Teaching one of the DISTAR programs: reading, language, or arithmetic; students required to teach approximately three hours a day from these materials, and to know the format for presentation of materials, correction procedures, and procedures for teaching to criteria.
Behavior Disorders. (G) $\mathbf{3 - 5}$ credit hours. Introductory experience for students having little or no previous contact with behaviordisordered children. Students work closely with a supervisor to develop an observation and data recording system, and to devise, implement and evaluate a teaching or therapeutic program for one child or small group of children.
Learning Disabilities. (G) 3 credit hours. Diagnostic and prescriptive teaching with children who have learning disabilities. A laboratory course.
Physically Handicapped. (G) 3-15 credit hours. Introductory experience with the physically handicapped child. For the beginning student, or those without experience working with physically handicapped children. Opportunity for observation of the interaction with physically disabled children in the classroom, adaptive physical education, and swimming. Basic consideration of task analysis, behavior modification, and specifying instructional objectives in relation to the physically handicapped child.
Teaching the Mentally Retarded. (G) 3-15 credit hours. Attention focused upon exterit to which the student is able to contribute to enrichment of the educational program for either EMR or TMR children through application of pupil data, teaching strategies, and teacher planning.

Supervision. (G) 3-6 credit hours. Practicum experiences in supervising teachers and other school-related personnel.
SpEd 439. The Gifted and Talented. (G) 3 credit hours. Provides students with an overview of problems, issues, and concepts related to the definition, identification, and administrative placement of gifted and talented students. The teaching of basic subject matter areas receives special emphasis.

## SpEd 462. Psychology of Exceptional

 Child. (G) 3 credit hours. A cross-categorical survey of knowledge about the identification, evaluation, classification, causes, learning performance, cognitive development, education, and personal-social adjustment of exceptional children and youth. Prerequisite : seminar in Exceptional Child.SpEd 463. Behavior Disorders. (G) 3 credit hours. Overyiew of behavior disorders observed in children ; includes categorical disorders and nosology, behavioral symptomatology, contemporary views of emotionally handicapping conditions and abnormality, social and emotional maladjustment in school settings, and teacher responsibilities concerning these children. Examination of behavioral, ecological, and psychosociological positions regarding intervention and education will be presented.
SpEd 464. Mental Retardation. (G) 3 credit hours. An overview of problems, issues, and concepts related to the definition and measurement of mental retardations; the bio-medical and socio-cultural causes of mental retardation ; the psychological and educational performance of the retarded ; and the socialvocational adaptation of retarded individuals.

## SpEd 465. Diagnosis Basic Skills. (G) 3

 credit hours. Comparison of various methods used in the diagnosis of reading problems. Development of a task analysis of the reading process from recent research data. Selection, administration, and analysis of criterion and norm-referenced tests. Utilization of criterion referenced tests in simulated diagnostic sessions. Study of characteristics of reading methods used in classroom instruction. Adaptation of these methods for the learning disabled child.SpEd 466. Learning Disabilities. (G) 3 credit hours. Introduces the history and current practices in the diagnosis and remediation of learning disabilities. Presents major theories of etiology, commonly used assessment instruments, and remedial materials and methods. Introduces issues and controversies in the field. Major focus is on learning disabilities related to academic achievement, language, and perceptual disorders. Approximately equal emphasis is given to etiological, diagnostic-remedial, and task analytic views of learning problems.
SpEd 467. Physically Handicapped. (G) 3 credit hours. An introduction to the etiology, incidence, and prevalence of major physically handicapped conditions, and their psychological, emotional, social, and vocational implications. Presents basic terminology needed to read medical records. Discusses psychosomatic and somatopsychological reactions.
SpEd 471. Administration of Special Education. (G) 3 credit hours. Organizing, financing, housing, equipping, staffing, and supervising the special education program; desirable educational provisions for each type of handicapped child; legal provisions for special education.
SpEd 485. Behavior Management with Exceptional Children. (G) 4 credit hours. With the impetus of mainstreaming, the enactment of P.L. 94-142 and the necessity
for educators to provide more effective and efficient instruction and behavior management for students with increasingly varied social, emotional, cognitive and learning styles, it is essential that educators be knowledgeable and experienced in the systematic application of principles of behavior modification. Presents information relevant to teaching new behayiors, strengthening existing behaviors, maintaining changed behaviors and reducing or eliminating undesirable behaviors. Observation, data collection and recording, and program evaluation are discussed and illustrated prior to the students' conducting a behaviorchange program.

## SpEd 486. Design of Instruction for the

 Handicapped. (G) 3 credit hours. Design, development, and evaluation of instructional material for handicapped children. Emphasis is on the construction of educational sequences for various types of learning tasks, including basic and advanced vocabulary, related concepts, rules, strategies, and independent learner applications of these tasks. Example selection, sequencing, teaching procedures, and assesment are discussed.Graduate Courses in General Special Education
SpEd 501. Research. Credit hours to be arranged.
SpEd 501. Research : Design of Special Education Research. 3 credit hours. Covers basic measurement and statistical concepts and research design. At the end of the term, the students will have a fully developed proposal for the thesis or field study.
SpEd 503. Thesis. Credit hours to be arranged.
SpEd 505. Reading and Conference. Credit hours to be arranged.

## SpEd 507. Seminar.

The following seminar topics in special education are offered with credits as noted. Other topics and credits may be arranged.
Introduction to Special Education Research. 1 credit hour. Introduces the student to major library reference tools, the use of APA style in scientific writing, and the basics of scientific research.
Advanced Research and Evaluation
Methodology. 3 credit hours. Application of statistics to actual research problems in special education. Three modules-assessment ; evaluation; and appropriate design for a specific research question-will introduce students to instruments and designs used in current research; progranmatic research, integrations of single-subject and group designs, and process as well as outcomes measures. Prerequisite : Two courses in statistics or experimental design.
Role of the Resource Consultant I. 3 credit hours. The role of the resource consultant; developing competences needed by resource consultants ; various models for support services to regular classes.
Role of the Resource Consultant II. 3 credit hours. Develops concepts introduced in the first part of the sequence ; the evaluation and development of media packages and modules related to delivery of services to students and school personnel.
Historical and Legislative Basis for Special Education. 3 credit hours. Major historical and philosophical contributions to special education; national, state, and local legislative and financial bases of special education; the rationale for all types of special-education services ; comparison of objectives of regular
and special education; personal philosophies of special education. P.L. 94-142.

## Learning Performance of the Develop-

 mentally Deviant. 3 credit hours. Advanced review of current knowledge about the major categories of human learning, and survey of the research literaure within categories of handicapped in each area of learning. Emphasis on integrating the research across various categories of handicapped children: identifying knowledge gaps; drawing implications for instructional programs.Cognitive and Personality Development of the Developmentally Deviant. 3 credit hours. Advanced study of the relationship between environmental and biological variables and the cognitive performance of developmentally deviant children. General topic areas include : intelligence, language, and social development. Emphasis on synthesizing traditional theoretical positions.
Diagnosis of Developmentally Deviant. 3 credit hours. Advanced reading on theory, research, and practice related to the diagnosis of deviant development in these domains: psycho-motor, brain function, cognition, language, achievement, cognitive-style, attitudes, and self-concept.
Rehabilitation Aspects of Developmentally Deviant. 3 credit hours. Extensive and comprehensive review of the rehabilitation field; historical origin and development, national, regional, and state programs, and current issues and trends; adult status of the handicapped given special emphasis; rehabili-tation-related theory and research especially as it pertains to disability and work.
Education of the Developmentally Deviant. 3 credit hours. Study of those modifications of educational materials, methods, and pedagogical science are presented and specialeducation techniques treated as extensions, refinements, or modifications presumably derived from them on the basis of developmentally deviant learner characteristics. The efficacy of special education's procedures receives special emphasis, as does the recognition, evaluation, and prognostication of trends in special-education oractices.

## Social-Cultural Aspects of Deviant

Development. 3 credit hours. Advanced study of relationship between genetics and environmental variables and the intellectual, linguistic, and personality development of handicapped children. Emphasis on relating current research to theoretical positions.
Advanced Design of Instruction. 3 credit hours. A continuation of the instructional design procedures introduced in Design Instruction. Topics include advanced problem solving strategies, pre-skill teaching, prompting and fading, program revision, and special learner problems. Example selection, sequencing, teaching procedures, and assessment are discussed in relation to these topics.
Educational Intervention for the Mentally Retarded and Physically Handicapped. 3 credit hours. For advanced students in special education ; generic processes of curriculum development with specific attention given to their application to the education of mentally retarded and physically handicapped individuals; closely related to the process of curriculum development, but not a methods course ; designed around three basic dimensions of curriculum development: factors influencing curriculum design ; development processes including formative and summative evaluation; and applied practices.
Educational Interventions for the Learning Disabled. 3 credit hours. An in-depth analysis of materials that have proven effective in teaching students who fall in the
bottom quartile of the school population. Includes materials endorsed by National Diffusion Network.

## Educational Interventions with Behavior-

 ally Disordered Children. 3 credit hours. Study and analysis of intervention models and procedures with behaviorally disordered children. Students will critically examine treatment alternatives, literature on the efficacy of treatment approaches, teacher competence and roles within the educational system. Application to regular and special classes is discussed and illustrated in detail.
## Advanced Curriculum for the Mentally

Retarded. 3 credit hours. Current curriculum theory, teaching methodology, instructional materials, and administrative grouping procedures; critical issues in the teaching of the mentally retarded ; topics will include curriculum at secondary levels and career education.
Neurologically Impaired. 3 credit hours.
Study of behavior based on organic neurological impairment of both a mild degree and gross manifestations of neurological impairment. Examination of the basis for these types of impairments, associated neurological features and the educational, psychological, and social aspects of children and adults with these problems; discussion of various therapeutic approaches.

## Neurological Basis of Behavior. 3 credit

 hours. Presentation of basic neuroanatomy and neurophysiology designed for education students and others without a strong science background. Groundwork for further discussion of various types of neurological impairment as are seen in organic behavioral disorders and cerebral palsy. Emphasis on familiarization with terminology and building up a basis for communication with medical and paramedical coworkers.Hyperactive Child. 3 credit hours. Study will include an historical review of childhood hyper activity, etiology and diagnostic evaluation; pharmacological, dietary, and behayior management ; parent counseling and training, and home management ; and behavior and educational management in the classroom ; also neurophysiologic, biochemical, and familial-genetic research.
Aggressive Child. 3 credit hours. Analysis of research relating to intervention techniques applicable to aggressive children.
Advanced Applied Behavior Analysis. 3 credit hours. Study and analysis of published literature regarding applied behavior analysis; critical examination of single-subject research methods and data analysis, literature concerning the uses and limitations of operant techniques applied to developmental, educational, and social problems, issues pertinent to generalization and maintenance of behavior change and the pragmatics of applying advanced operant principles to handicapped learners.
Administration of Pupil Personnel. 3 credit hours. Mutual development of a concept of pupil-personnel services based on interpersonal and group processes ; emphasis on development of services oriented to pupil needs rather than generalized professional roles; consideration of various types of administrative structures for managing and applying supportive resources.
Grant Writing and Project Management.
3 credit hours. Sources for grants and contracts ; planning, writing, and evaluating grant proposals; dissemination; project management.
Institutional Programs for the Excep-
tional. 3 credit hours. Institutional programs purposes; advantages, disadvantages; insti-
tutional organization; personnel ; standards; problems.
Community Residential Facilities. 3 credit hours. Various community-based residential facilities presented as an alternative to the institutional treatment model ; issues such as deinstitutionalization, mainstreaming, normal ization, community reintegration, and least restrictive alternatives will be explored for all disability groups.
Law and Special Education. 3 credit hours. Introduces legal analysis and reasoning in matters related to special education. The case method is used extensively, but not exclusively. Topics include : legal structure and terminology; sources of law, right to an education, labelling, stigma, and classification ; right to treatment and the least restrictive environment, accountability of educators for results and for procedural due process, and other matters ; pertinent federal and state statutes and rules and regulations.

## Law and Higher Education, 1-3 credit

 hours. Current topics of concern to students and faculty in higher education, such as admission procedures, constitutional rights, plagiarism, residency requirements, and tenure.
## SpEd 509. Practicum.

The following practicum topics are offered with credits as noted. Other topics and credit hours may be arranged.
Resource Consultant III. 3 credit hours.
The role of Resource Consultant III is to provide advanced training experience for students in a variety of school settings where they will have the opportunity to practice and demonstrate competence in developing, implementing, administering, and evaluating school programs, and gain skills in the ability to work with teachers and administrators at the building and district level in a consultant or coordinator capacity. Also for students who are working toward the Standard Handicapped Learner Endorsement.
Behavior Disorders. 3-15 credit hours. Advanced study. Emphasis on providing direct services and instruction and intervention programs for disturbed children and youth. Students assume responsibility for designing a program-including initial observation, determining objectives, applying instructional and intervention strategies, and evaluating program effectiveness.
Physically Handicapped. 3-15 credit hours. Independent projects involving various aspects of education, diagnosis, and prescription to be arranged with the instructor, or, for the advanced students, extensive planning and implementation of educational programs with physically handicapped children in the classroom.
Learning Disabilities. 3 credit hours.
Consultation with teachers of children with learning disabilities. Extension and improvement of skills required for instruction of children with severe learning disabilities. Teaching the Mentally Retarded. 3-15 credit hours. Designed for experienced teachers or those who have successfully completed the SpEd 409 Practicum of the same title. Emphasis is upon design and delivery of an instructional unit, management of pupil behavior, and evaluation of instructional outcomes. It is expected that the student will spend a minimum of five half-days in the classroom.
Administration of Special Education. 3-15 credit hours. Assignment to one or more programs for practical experience in one or more aspects of administration and supervision. This may be working with a project,
supervising student teachers, or working in a district.
College Teaching. 3 credit hours. Examination of various methods of college classroom organization and instruction. Evaluation of texts relevant to practices in college teaching. Presentation of minimum of three organized lectures, critiques by instructor, and other college staff.
SpEd 509. Supervision. 3-6 credit hours. Practicum experiences in supervising teachers and other school-related personnel.

## SpEd 562. Issues in Exteme Learning

Disorders. 3 credit hours. Current issues in the field of learning disorders; definitional problems surrounding the relationships among mental retardation, emotional disturbance, cultural factors and learning problems ; the issue of whether learning disabilities are inherent within the child or within the environment ; the extent to which learning disorders, primarily reading problems, can be prevented by specific training ; the evaluation of new approaches and materials; the efficacy of predicting learning disorders ; the role of the learning disabilities teacher; the accountability of remedial programs.
SpEd 563. Diagnosis of Mental Retardation. 3 credit hours. Reviews past and current trends in diagnosis and classification of mental retardation. Emphasizes differential diagnosis as it relates to placement. Evaluates traditional as well as emerging diagnostic techniques. Student either observes or participates or does both in clinical conference on case study.

## Handicapped Learner <br> Upper-Division Courses <br> Carrying Graduate Credit

SpEd 407. Seminar. (G)
The following seminars on the subject of the handicapped learner are offered with the credits noted.
Reading Instruction for the Handicapped. (G) 3 credit hours. A methods course designed to increase knowledge of the components of reading, systematic instructional methods for the disabled reader, and commercial and teacher-prepared materials. For each of the word recognition skills, the elements are defined, instructional steps sequenced, commercial materials introduced, alternate teaching methods explored and example lessons completed. Intervention strategies to facilitate comprehension, instruction on necessary entry behaviors to reading, reading assessment, study skills, alternate approaches to reading instruction and research on reading are discussed.
Language Arts Instruction for the Handicapped. (G) 3 credit hours. A methods course focusing on handwriting, spelling, written expression, and language instruction for the mildly and moderately handicapped; components of instruction, background information, and pertinent research. Instructional steps are explored for each of the academic areas : assessment, formulation of objectives, sequencing of instructional steps, introduction of skills, practice activities and selection of instructional materials; special emphasis on analyzing error patterns in children's performance and designing appropriate programs to meet their individual needs.
Math Instruction for the Handicapped. (G) 3 credit hours. A methods course focusing on systematic instruction of math skills for the mildly and moderately handicapped; introduces instructional procedures for teaching math facts, computations, measurement,
money, time, and math reasoning ; instructional sequences, evaluation of instructional materials in the math area, direct instructional procedures, practice activities, assessment and ongoing measurement of child's progress; evaluation of math textbooks used in regular education and possible modifications needed for use with handicapped children.

## SpEd 409. Practicum: Handicapped

 Learner I. (G) 4 credit hours. Individual instruction; a competency-based experience offered to trainees in the Handicapped Learner Norm program; introduces students to a model of systematic instruction of the handicapped and provides opportunity to apply this model in a tutorial setting ; intensive training on all components of systematic instruction; assessment of current functioning levels; development of long-term objectives, shortterm objectives and instructional sequences; program planning including the design of antecedent and consequent interventions; data recording and program modification; thereafter, trainees tutor a child four days a week; continuous supervision and video-taping of teaching sessions provide trainees evaluation of their teaching behaviors. Prerequisite : Teaching Skills I or concurrent enrollment; completion of Student Teaching ; and admission to the endorsement program.SpEd 409. Practicum : Handicapped Learner II. (G) 3 credit hours. Offered to trainees in the Handicapped Learner Norm program following completion of Handicapped Learner I. Competency-based, and designed to extend systematic instructional skills to small group instruction. Prior to placement in the field, trainees receive extensive training in small group instruction and classroom orchestration. Prerequisite : Completion of Handicapped Learner I.

## Graduate Courses on the Handicapped Learner

SpEd 509. Practicum: Handicapped
Learner III. 5 credit hours. Practicum III is an extension of Practicum II in the Handicapped Learner Norm program. During this practicum, the traince has expanded responsibility in the classroom including additional hours of instruction orchestration of a period of the day, and expanded areas of instruction. This is the final competency-based practicum in the Handicapped Learner Norm program. Prerequisite: Completion of the Practicum on Handicapped Learner II.
SpEd 509. Practicum: Supervision of Teachers of Handicapped Learners. 3-12 credit hours. Offered to individuals preparing for supervisory roles with teachers of either the mildly or the moderately handicapped or both. Practicum Supervision will work with trainees in the Handicapped Learner Norm program involved in tutorial or small group instructional practica. Observation procedures, feedback procedures, and communication skills will be introduced to practicum supervisors. Consent of the instructor required.

## Severely Handicapped Learner <br> Upper-Division Courses Carrying Graduate Credit

## SpEd 407. Seminar. (G)

The following seminars on the subject of the severely handicapped are offered with the credit noted.

The Severely Handicapped Learner. (G) 3 credit hours. Etiology of severely handicapping conditions, of severe mental retardation, severe physical (multiple) handicaps, and severe emotional disturbances. Presents information on early intervention program, school age services, and vocational and residential programs for adults. Survey course designed for individuals providing services to, but not directly teaching, the severely handicapped.
The Severely Disturbed Child. (G) 3 credit hours. Depth and breadth in fundamental concepts and theories pertinent to intervening with autistic and schizophrenic children cognitive, perceptual, intellectual and behavioral deficits ; language acquisition and development ; medical, psychological and educational management; and specific topics salient to encountering and anticipating the autistic child.

## Methods and Content for the Severely

 Handicapped-I. (G) 3 credit hours. Includes assessment, program development, teaching methodology and designing learning environments for the young severely handicapped. Presents normal development to chronological age four in motor, language, self-help, social and cognitive skills. Reviews early intervention programs.
## Methods and Content for the Severely

 Handicapped-II. (G) 3 credit hours. Presents program development and reviews curricula appropriate for the severely handicapped in the academic content areas of reading, mathematics, and related areas. Emphasizes functional academic skills. Prerequisite : Methods and Content I.Methods and Content for the Severely Handicapped-III. (G) 3 credit hours.
Presents programming concerns, teaching
methodology, and curricula for functional living skills and vocational training skills for the adolescent and adult severely handicapped. Language Acquisition of the Handicapped. (G) 3 credit hours. Introduction to normal language acquisition, the characteristics of language development in the severely handicapped; and strategies for facilitating language; methods of nonverbal communication such as signing and language boards.
Language Assessment and Intervention with the Handicapped. (G) 3 credit hours. Training in the use of assessment tools for language skills with severely handicapped individuals; and use of formal intervention programs; strategies for intervention, alternate modes of communication, techniques for writing and planning language programs. Prerequisite: Language Acquisition of Severely Handicapped.
Physical Management of the Multihandicapped. (G) 3 credit hours. Survey of management techniques for multi-handicapped populations ; positioning and handling; working with hearing-impaired, blind, and deafblind; adapting equipment and programs; managing medical problems.
Seminar: Habilitation of the Severely Handicapped. (G) 3 credit hours. An analysis of procedures and procedural research in vocational habilitation of severely handicapped adults; task analysis, direct instruction on vocational skills, and procedures for supervising production in long-term sheltered employment.
Services for Multiple Handicapped. (G) 3 credit hours. Meeting the needs of the persons with more than one handicap through the use of an interdisciplinary team.
SpEd 409. Practicum: Severely Handicapped I. (G) 2-15 credit hours.

Focuses on acquisition of competence for teaching the severely handicapped child in one-to-one instructional settings.
SpEd 409. Practicum : Severely Handicapped II. (G) 2-15 credit hours. Focuses on acquisition of competence for teaching the severely handicapped in small group instructional settings. Includes program development and formation of individual educational programs. Prerequisite : Practicum Severely Handicapped I.
SpEd 409. Practicum: Severely Handicapped III. (G) $2-15$ credit hours.
Focuses on acquisition of competence for teaching the severely handicapped in independent activities. Includes curriculum development and training of staff. Prerequisite: Practicum Severely Handicapped I and II.

## Graduate Courses on the Severely Handicapped Learner.

SpEd 509. Practicum: Internship Severely Handicapped. $9-15$ credit hours. Requires full-time involvement in classroom for the entire term. Focuses on assessment, determining instructional objectives, developing programs, training staff, designing classroom schedule, and working with school and service agencies. Prerequisite: Practicum Severely Handicapped Learning I, II, and III.

## SpEd 509. Practicum: Supervision of

Teachers of the Severely Handicapped. 3-12 credit hours. Focuses on procedures for training and evaluating practicum student competence for teaching and management, program development, individual educational programs, and aids training for the severely handicapped.


# College of Health, Physical Education, and Recreation 

Lynn S. Rodney, Ph.D., Dean, Professor of Recreation and Park Management (administration). B.A., 1936, M.A., 1938, Washington State ; Ph.D., Michigan, 1955.
Betty F. McCue, Ph.D., Associate Dean ; Professor of Physical Education (history and philosophy). B.S., Pittsburgh, 1945 ; M.S., MacMurray, 1948 ; Ph.D., Iowa, 1952.
William P. Rhoda, D.Ed., Associate Dean ; Professor of Physical Education (administration). B.S., Pennsylvania State, 1939 ; M.S., 1947, D.Ed.,
Oregon, 1951.
Norval J. Ritchey, M.S., Assistant Dean ; Professor of Physical Education (administration). B.S., 1953, M.S., 1956, Oregon.

The College of Health, Physical Education, and Recreation is responsible for three programs : the service courses

in health education and physical education which meet the University's graduation requirements; recreational programs which include intramural sports for men, women's recreation association, and open recreation programs; and professional study, both undergraduate and graduate, in dance, health education, physical education, and receation and park management. A support program in the study of gerontology is also offered.

Undergraduate major programs are offered in the fields of health education, physical education, dance, and recreation and park management. Graduates of the school hold positions as high school teachers of physical education and health education; athletic coaches; directors of high school athletics; supervisors of health and physical education; community recreation and playground directors; leaders in YMCA, YWCA, and other youth-

organization work; directors of restricted and corrective physical education; workers in the field of recreation therapy and physical therapy; college and university teachers and research workers in child growth, health education, physical education, and dance.

The four departments within the College each have a policy regarding premajors. Interested students are encouraged to consult department heads for details. It is College policy that all junior students consult their faculty advisers at the beginning of the year.

The Department of Dance requires their major students to confer with advisers at the beginning of each term.

Departments within the College offer both undergraduate and graduate programs as well as cooperatively offering interdepartmental master's and doctoral degree programs.


## Dance

## Faculty

Linda S. Hearn, M.A., Department Head, Associate Professor of Dance (folk, ballroom, modern, composition, production, curriculum ). B.S., 1962, M.A., 1965, The Texas Woman's University.
Janet W. Descutner, M.A., Associate Professor of Dance (modern, notation, history, composition, aesthetics, jazz, tap). B.A., 1963, M.A., 1965, Ohio State University.
Bruno V. Madrid, M.Mus., Senior Instructor in Dance (accompaniment, composition, music for dance). B.Mus., Santo Tomas, Philippines, 1955 ; M.Mus., Oregon, 1963.
T. Ray Faulkner, Ph.D., Associate Professor of Dance (history, research, aesthetics, composition, Director, Graduate Studies in Dance). B.A., 1954, Oklahoma College of Liberal Arts; M.A., 1965, Ph.D., 1969, The Texas Woman's University. Susan Zadoff, Instructor in Dance (classical ballet). Professional dance experience with the Ballet Russe de Monte Carlo, the Newark State Ballet Company, Broadway Musical Theatre, and national television, plus private studio teaching.
Kenneth R. Aldrich, M.A., Instructor (ballroom, Renaissance, Folk/Ethnic, folk performance). B.A., 1974, California State, San Bernardino ; M.A., 1978, Oregon.
Joan H. Lazarus, M.A., Instructor (modern and ballet technique). B.A., 1973, Indiana, Bloomington ; M.A., 1978, Oregon.

## Faculty Emeriti

M. Frances Dougherty, Ph.D., Professor Emerita of Dance (philosophy, aesthetics, history). B.A., 1935, M.A., 1940, University of Northern Colorado ; Ph.D., New York University, 1959; at Oregon since 1959.

The Department of Dance offers a variety of programs and activities for undergraduate and graduate students at the University of Oregon, and for the larger communities of Eugene, the state of Oregon, and the Pacific Northwest.
Facilities: The University provides three dance studios and one gymnasium for use by classes and special activities in dance. There is one multi-purpose studio with mirrors and one large gymnasium for folk, ballrom, square, and tap dance in Gerlinger Hall. The two large studios with mirrors which
are in Gerlinger Annex are used for ballet, modern, and jazz classes. In addition to serving as classrooms and rehearsal spaces, the studios in Gerlinger Annex convert into the attractive M. Frances Dougherty Dance Theatre which has modern lighting and stage equipment for concert productions, and seating for 285 persons.
Repertory Dance Companies: The Department of Dance has two Repertory Dance Companies: The Dobré Folk Ensemble and the Concert Dance Theater which includes modern, jazz, and ballet. Membership in the companies is open to all University students by audition. Numerous concerts on campus and tours throughout Oregon and the Northwest are held each year. The touring dance programs, under joint sponsorship of the Department of Dance and the Associated Students of the University of Oregon, include concert performances as well as masterclasses and lecture-demonstrations for public schools, colleges, universities, civic organizations, and community concert series. Some of the concerts and tours are the joint responsibilities of both companies and some are separate. Service Course Programs: CPE (co-ed physical education) classes offered by the Department of Dance may serve to meet the University's five-term physical education requirement for graduation. The CPE service classes in clance are instructional in nature with emphasis on the theoretical and practical techniques of the various forms of dance. The lower-division courses are generally beginning or elementary instruction and the upperdivision courses are the intermediate and advanced levels of instruction. A student may elect to satisfy all five terms of the University requirement through enrollment in the various CPE dance classes.
The courses are numbered from CPE 180 through 198 and from CPE 380 through CPE 398; complete details of courses offered each term may be found in the Time Schedule of Classes. Lozer-division CPE dance classes: Modern Dance, Ballet, Tap Dance, Jazz, Mine, Ballroom Dance, Square Dance, Folk Dances of Central Europe, Folk Dances of Scandinavia, Folk Dances of the Balkans, Folk Dances of the Near East, Folk Dances of Mexico and South America, and a general introduction course in International Folk Dance.
Upper-division CPE dance courses: Modern Dance, Ballet, Tap Dance, Jazz, Ballroom Dance, Folk Dance, Square Dance.

Additional Dance Activities: Advanced dance students are eligible for practicum credit in dance choreography. Through this program, any University student may audition a dance for performance in student concerts, or may gain experience in teaching, lighting, costuming, make-up, and management of productions or experience a combination of these. Several professional teachers and dancers in modern, ballet, and folk dance are brought to campus each year to give concerts and masterclasses. In addition, there are weekly recreational activities in folk dance, square dance, and ballroom dance. These activities are open to everyone in the University community.

## Undergraduate Studies in Dance

Curricula in dance leading to the Bachelor of Arts or Bachelor of Science degrees provide theoretical and technical preparation in ballet, folk, and modern dance forms. Through course offerings within the Department and selected curricula in related fields of study, specialization may be directed toward performance, choreography, teaching, pre-therapy, recreation, notation, or ethnology.

A program of dance concentration may be elected by students whose major is in another field. This program includes the study of dance as an art form, a social form, and a theater form. Requirements are met by the election of a minimum of 18 credit hours of professional dance theory courses, 12 credit hours in dance laboratories, and a 9 -credit hour sequence in a related discipline. Admission into a program of dance concentration is by approval of the department head.
Auditions: All students who are majoring in dance or who are in a program of dance concentration must audition prior to Registration Fall Term for placement by the dance faculty in the appropriate level of modern and ballet technique. Auditions are held during New Student Week two days prior to registration. Special auditions for following terms will be given depending on need. Announcements for the special auditions will be posted in the department as well as in the Oregon Daily Emerald.

Admission: Students eligible for admission to the University of Oregon are admitted to professional courses in dance on a premajor basis. Entering freshmen students should have a basic knowledge in music as well as experience in either ballet, folk, or modern
dance techniques or all three. In addition, two-year college transfers must have a 2.5 cumulative GPA, should have met the University's English Composition and Health Education requirements, and have completed a majority of the University's group requirements. Any deficiencies in lower-division professional courses must be met either by proficiency examination or by completion of these courses. Freshmen and transfer students who are in the premajor dance program must enroll in and pass either D 152, Basic Rhythms, or D 252, Fundamentals of Rhythm during fall or winter terms ; and D 251, Introduction to Dance, fall term, to be eligible to continue to enroll in professional technique classes. Some provision is made for students failing these theory classes to enroll in the Service Course program until such time as the D 152, D 252 , and D 251 course requirements can be met.

A sudent who is a premajor will be admitted to the Major Program in Dance upon completion of the following requirements: Passing, with a grade of C or better, the D 152, D 251 , and D 252 professional theory courses, and passing with a grade of B or better, the D 192, Ballet Technique Laboratories, the D 192, Modern Technique Laboratories, and a D 192, International Folk Dance class. If, after auditions a student is placed above the D 192 level of technique in ballet or modern, this waives that prerequisite for major status. Students must petition to the Department Head for change of major status from premajor to full major.
Advising: Students who are admitted to the department as premajors, majors, or dance options must meet with a dance faculty adviser prior to registration each term. Appointment schedules for advising are posted at departmental offices. It is necessary for a student to have an adviser's signature for permission to enroll in professional dance courses.

Requirments for the Baccalaureate Degree: Candidates for the baccalaureate degree with a major in dance must satisfy all general requirements of the University, elect appropriate courses in related areas, and complete the professional course requirements of the Department of Dance. Specific course requirements of the University are: English Composition (two courses) 3 credit hours each; Personal Health (HE 250) 3 credit hours. University Group Requirements for professional students are: twelve courses of at least 3 credit hours each in arts and letters,
social science, and science. At least three courses must be taken in each of the three groups plus three additional courses from any of the groups.

Requirements for the Bachelor of Arts or Bachelor of Science degrees are as follows: B.A., 36 credit hours in Language and Literature to include proficiency in a foreign language equivalent to two years of study; B.S., 36 credit hours in Science or Social Science courses as listed in the General Requirements section of this catalog.

Department of Dance requirements are 24 credit hours in lower-division courses as follows: Introduction to the Dance (D 251) 3 credit hours; Fundamentals of Rhythm (D 252) 3 credit hours ; Movement Notation (D 253) 3 credit hours; Intermediate Movement Notation (D 254) 3 credit hours; Modern Dance Lab (D 292) 6 credit hours ; Ballet Lab (D 292) 4 credit hours; Folk Dance Lab (D 292) 2 credit hours.

Departmental requirements of upperdivision courses are 36 credit hours as follows: Dance Composition I (D 351 ) 3 credit hours; Dance Composition II (D 352) 3 credit hours; Dance Accompaniment (D 353) 3 credit hours; Dance Laboratory (D 392) 6 credit hours in modern, folk, or ballet; Production Workshop (D 408) 1 credit hours; Practicum Choreography (D 409) 3 credit hours; Dance Production (D 451 ) 3 credit hours ; Dance Cultures of the World (D 452) 3 credit hours; Ballet from the Courts to Balanchine (D 453) 3 credit hours ; Evolution of Modern Dance (D 454) 3 credit hours; Teaching Dance (D 491G) 3 credit hours; Dance Apprenticeship (D 492) 4 credit hours.

Course requirements from outside the Department of Dance are as follows: Fundamentals of Speech (RhCm 121) 3 credit hours; Cultural Anthropology, 3 credit hours; and one of the two following groups: Human Anatomy (Bi 391, 392) or Scientific Foundations (PE 421, 422), and Kinesiology (PE 472).

Completion of 186 credit hours for graduation as required by the University allows a student to select remaining credit hours in areas related to specialized endeavor or personal interest.

## Honors College Degree in Dance:

Please see the Honors College section of this catalog for specific information concerning the Honors College requirements. The special requirements of the Department of Dance for majors enrolled in the Honors College include 6 credit hours of independent study in choreography, ethnology, notation, or
technical production leading to the senior honors thesis ; a choreography (minimum 10 minutes) with written description and discussion, or, Honors essay on a selected research topic.

## Graduate Studies in Dance

The Graduate School of the University of Oregon offers the Master of Science and the Master of Arts degrees through the College of Health, Physical Education, and Recreation in the Department of Dance, and an Interdepartmental master's degree program with emphasis in Dance is available through the College of Health, Physical Education, and Recreation.
Admission: Students seeking admission to master's degree programs should obtain application forms from the Department of Dance. One completed copy should be sent to the Office of Admissions and the other to the Department of Dance. An official transcript of the college record must be submitted with each application. Enrollment is open to an individual who has graduated from an accredited college or university and has a cumulative undergraduate grade point average of 2.75 . In addition, all applicants must submit three letters of recommendation and present evidence of scoring at least 35 on the Miller Analogies Test or a minimum score of 470 on the verbal portion of the Graduate Record Examination. A student who has a GPA of less than 2.75 may be admitted upon review of credentials and an acceptable score on either of the graduate examinations. Adequate preparation in dance theory and technique must be assumed an undergraduate prerequisite for admittance to graduate programs in dance.

A student whose undergraduate preparation does not meet sufficient curricular requirements in the Department of Dance, but who has adequate professional training may be granted admission on a post-baccalaureate status in order to enroll in classes which will fulfill prerequisites for admission to the graduate program in dance. See the Graduate School section of this catalog for specific details of the postbaccalaureate program.
Graduate Awards: Limited graduate awards for teaching assistantships are available. Persons seeking only admission to the graduate program are encouraged to submit a videotape or Super 8 film including both axial and locomotor movement. The tape or film is required of those applying for a graduate award.

Requirements for the Master's Degrees: A minimum of 45 credit hours of graduate work must be completed for the master's degree. A minimum of 30 credit hours must be earned on the Eugene campus after admittance to the graduate program. A student seeking the Master of Arts degree must meet the language requirement of the Graduate School

Master's-degree candidates who have not completed undergraduate degrees in dance are required to complete the following undergraduate core requirements or their equivalent prior to or during their graduate study: Dance Accompaniment (D 353) ; Fundamentals of Rhythm (D 252) ; Movement Notation I and II (D 253, D 254) ; Dance Composition II (D 352 ) ; Dance Production (D 451) ; Dance History (at least two courses) (D 452G, D 453G, D 454G). Prerequisite requirements may be waived by one of the following means : 1) passing proficiency examinations provided by the Department; 2) presenting a certificate of proficiency in notation from the Dance Notation Bureau; 3) presenting evidence of acceptable practical experience in all aspects of dance production.

All work for the master's degree must be completed within a period of seven years. This includes work for which credit is transferred from another institution, the thesis, and the final examination.
Graduate Core Courses: Dance as a discipline for the choreographer, the performer, the recreationalist, the teacher, the researcher, and the therapist has a common base of involvement. It is appropriate therefore, for all graduate students to be required to take the following core of 9 credit hours of graduate classes: Research in Dance (D 501 ) ; Administration of Dance in Education (D 493G) ; and Aesthetic Bases for Dance in Art and Education (D 593).

Master's Degree Program in Dance: A student may elect one of two options through this degree program.

Nonthesis Option: A minimum of 24 credit hours selected from Dance History (D 452G, D 453G, D454G) 3 credit hours each; Practicum (D 409G) 3 credit hours each term for a total of 9 credit hours ; Reading: Literature in Dance (D 505) 1-6 credit hours; Research in Dance (D 501) 3 credit hours; Seminar (seminars are arranged according to student needs ) (D 507.) 3 credit hours; Workshop: Ballet, Modern, Folk (D 508) 6 credit hours ; and Aesthetic Bases for Dance in Art and Education (D 593) 3 credit hours.

Included in the 24 credit hours must be the Graduate Core Requirements as listed above. In addition, the nonthesis program requires 21 credit hours from two other fields of study which relate to dance, with a minimum of 9 credit hours in any one field. Course selections must be approved by the respective areas. Satisfaction of specific requirements of the Graduate School for the master's degree without thesis must apply here, also.

Thesis Option: A minimum of 24 credit hours selected from dance professional courses as listed for the nonthesis option including the Graduate Core Requirements ; at least 12 credit hours in another field related to an approved thesis topic with specific courses to be defined by the relating area; a minimum of 9 credit hours in D 501 Research and D 503 Thesis.

Six credit hours of Reading and Conference work shall be the maximum allowed for either the thesis or nonthesis option except in special circumstances determined by the Department Head. No more than six credit hours of D 508 Workshop will be allowed to appy toward the degree requirement.
Final Examination: A final examination is required for both the thesis and nonthesis program of study. For the student electing not to write a thesis, a written examination of three hours and an oral examination of not less than one hour is required. The written examination questions will be prepared and papers read by a committee representing the fields included in the student's program of study. The decision to pass or fail a candidate will be made by this committee based upon the results of the written and oral examinations.

The thesis proposal for the student electing this program must be approved by a committee of no less than three persons representing the fields of study relating to the program and thesis topic. Requirements of the Graduate School are to be followed in the preparation and defense of the thesis. The final examination is oral and is administered by the student's thesis committee.
Interdepartmental Master's-Degree Dance Emphasis Program: Through the selection of courses from the four departments of the College of Health, Physical Education, and Recreation a student may elect one of the following options for an Interdepartmental Master's Degree:

Option I: 24 credit hours in graduate courses including the 9 credit hours of Graduate Core Requirements in the

Department of Dance ; 15 credit hours from a second Department within the College; and 9 credit hours of thesis or 9 credit hours of electives from within the College.

Option II: 24 credit hours of graduate courses including the 9 credit hours of Graduate Core Requirements in the Department of Dance; 12 credit hours from each of two other departments within the College.

The course selections in the various departments must be interrelated in a logical and concentrated manner. Admission to the program and course selection must be approved by the two or three departments of the student's choice. For specific information concerning the Interdepartmental Master's-Degree Program see the College of Health, Physical Education, and Recreation Graduate Section of this catalog.

## Undergraduate Courses

D 152. Basic Rhythms. 1 credit hour. Music notation and elementary musical devices used in the dance.

## D 192. Dance Laboratory. 2 credit hours

 any term. For professional students. Techniques in folk, ballet, and modern dance.
## D 199. Special Studies. 1-3 credit hours.

D 199. Ballet Vocabulary. 2 credit hours. For professional students. A laboratory to include discussion and application of basic ballet terminology as it relates to the understanding of ballet and its performance. To be taken concurrently with D 192, Dance Lab Ballet I.
D 199. Ballet Caractère Dance. 2 credit
hours. For professional students. Laboratory in the stylized form of national folk dances as adapted for classical ballet. To be taken concurrently with D 192, Dance Lab Ballet II, fall term, and D 292, Dance Lab Ballet III, winter term.
D 199. Ballet Staging. 2 credit hours. For professional students. Laboratory to include elements of solo and corps techniques. To be taken concurrently with D 292, Ballet III, fall term, and D 192, Dance Lab Ballet I, winter term.
D 199. Elementary Ballet Pointe. 2 credit hours. For professional students. Laboratory in beginning pointe work in ballet to include barre, center floor, and some adagio. To be taken concurrently with D 292, Dance Lab Ballet III, spring term.
D 199. Improvisation. 2 credit hours. For professional students. Laboratory to include the development of personal movement vocabulary with emphasis on spontaneity and exploration of dynamics (time, space, force, flow). To be taken concurrently with D 292, Dance Lab Modern III, fall term, and D 192 , Dance Lab Modern I and II, winter term.

## D 199. Beginning Jazz and Tap. 2 credit

 hours. For professional students. Laboratory to include dance techniques in various ffiazz and tap dance styles. To be taken concurrently with D 192, Dance Lab Modern I and II, spring term.D 199. Elements of Repertory. 2 credit
hours. For professional students. Laboratory to include modern technique emphasizing performance elements ; short segments from various modern dance repertories included.
To be taken concurrently with D 192, Dance Lab Modern I or II, spring term.
D 251. Introduction to Dance. 3 credit hours. An overview of professional and educational aspects of dance, the function of dance in society, and the significance of dance as an art form in contemporary culture; offered fall term.
D 252. Fundamentals of Rhythm. 3 credit hours. Rhythm as a basic factor for movement. Rhythmic devices used in the dance notation and rhythmic analysis.
D 253. Movement Notation. 3 credit hours winter. A study of the process of recording movement graphically; the conversion of the effort and shape of motion into symbols from which original movement patterns can be reconstructed. Prerequisite: Basic Rhythms (D 152), or consent of instructor.

## D. 254. Intermediate Movement Notation.

 3 credit hours spring. Theory and application of intermediate principles of Labanotation. Prerequisite : D 253.D 292. Dance Laboratory. 2 credit hours. For professional students. Movement theory in folk, ballet, and modern dance. Prerequisite: D 192 or equivalent.
D 351. Dance Composition I. 3 credit hours
fall. Analysis of the dance medium, and the relationship of the aspects of time, space, and force to that medium. Principles of form basic to dance composition. Prerequisite : D 252.

## D 352. Dance Composition II. 3 credit

hours winter. Compositional forms and styles in dance. Preclassics and modern dance forms. Prerequisite: D 351.

## D 353. Dance Accompaniment. 3 credit

 hours spring. Function of accompaniment for dance skills and composition. Types of accompaniment-instrumental, electronic, percussion, voice. Prerequisite: D 351, or D 352.D 354, 355, 356. Theoretical Foundations of Modern Dance. 3 credit hours each term. A comparative study of modern dance to include analysis of theoretical framework, stylistic emphasis, and aesthetic significance of that style in technique and composed works. Prerequisite: D 292-392, or consent of instructor.
D 357. Dance in Musical Theater. 3 credit hours. Study of basic movement vocabulary needed to perform and stage choreography for musical theater and opera. Lecture and laboratory. Consent of instructor is required.
D 392. Dance Laboratory. 2 credit hours. For professional students. Elements of performance for folk, ballet, or modern dance. Prerequisite : D 192 or D 292, or consent of instructor.
D 403. Thesis. Credit hours to be arranged. D 405. Reading and Conference. Credit hours to be arranged.
D 406. Special Problems. Topics and credit hours may be arranged as interest warrants and faculty assignments permit.
D 407. Seminar. Credit hours to be arranged.
D 407. Seminar: Body Fundamentals. (G) 3 credit hours. For professional students. Lecture and laboratory. An introduction to anatomical and kinesiological analysis of movement ; Bartenieef's correctives ; principles of Alexander technique, and Sweigart's ideokinetic facilitation, with a view to prevention and care of dance injuries.

D 408. Workshop. Credit hours to be arranged. Includes student choreographies, production and repertories.
D 410. Ballet Pointe. 2 credit hours. For professional students. Laboratory in intermediate and advanced pointe work in ballet to include barre, center floor, and adagio: Prerequisite : D 292, Dance Lab Ballet III or instructor's consent.
D 410. Advanced Jazz. 2 credit hours. For professionial students. Laboratory to include dance techniques in various jazz dance styles. To be taken concurrently with D 292, Dance Lab Modern III or D 356, Theoretical foundations of Modern Dance, spring term.
D 410. Intermediate Jazz and Tap. 2 credit hours. For professional students. Laboratory to include dance techniques in various jazz and tap dance styles at the intermediate level. To be taken concurrently with D 292, Dance Lab ModernIII or D 355, Theoretical Foundations of Modern Dance, winter term.
D 410. Advanced Ballet Staging. 2 credit hours. For professional students. Laboratory to include elements of solo and corps techniques; short movement segments will be drawn from standard ballet repertory. To be taken concurrently with D 392, Dance Lab Ballet IV, spring term.
D 409. Practicum. Credit hours to be arranged.
D 451. Dance Production. 3 credit hours. Production problems of staging, lighting, and costuming for the dance ; dance demonstration and concert. Offered fall term with a 1-2 credit hour laboratory required for winter or spring term; D 408 laboratory is a minimum of thirty class hours of practical application.
D 492. Dance Apprenticeship. 2 credit hours. For professional students. Directed activities related to the teaching of dance; selection of materials, class organization and management ; student teaching. Prerequisite: minimum of two courses or their equivalent in the area of apprenticeship.

## Upper-Division Courses Carrying Graduate Credit

D 409. Practicum. (G) Credit hours to be arranged.
D 452. Dance Cultures of the World. (G) 3 credit hours fall. Study of the function of dance in pre-literature pre-technological societies leading to the development of dance as a theatrical form in world cultures. Prerequisite : cultural anthropology, 3 credit hours, or fine arts, 3 credit hours.
D 453. Ballet from the Courts to Balanchine. (G) 3 credit hours winter. Social and theater dance forms of Western cultures from the Middle Ages through 18th-Century ballet into the era of contemporary art.
D 454. Evolution of Modern Dance. (G) 3 credit hours spring. Influences of leading dance artists ; dance in education; dance in psychotherapy; new directions in concert and theater forms; emphasis on the dance in the United States.
D 455. Dance Composition: Group Forms. (G) 3 credit hours. An examination of the problems and special considerations required by group choreography and an introduction to the communication of personally created movement to other dancers. One two-hour class per week plus rehearsals as scheduled by student choreographers. Prerequisite: D 352 or consent of instructor.

D 491. Teaching Dance. (G) 3 credit hours. Present teaching progressions, film use and sources, accompaniment, record sources and use, and a thorough introduction to the prominent teaching manuals of dance. The course prepares the dance major student to apprentice teach in a University dance class. Prerequisite : Junior standing.
D 493. Administration of Dance in Education. (G) 3 credit hours. Organization and administration of a dance program in colleges, universities, and at the secondary level for public schools. Prerequisite: D 491G, D 492, or consent of instructor.

## Graduate Courses

D 501. Research. The following research topic is scheduled with credits as noted.
Research in Dance. 3 credit hours fall term. An evaluation of, and methods related to, research in Dance. Includes identification of a problem, preparation of the proposal, and format of the thesis. Graded Pass/No-Pass only:
D 502. Supervised College Teaching. Credit hours to be arranged.
D 503. Thesis. Credit hours to be arranged. No-grade course.
D 505. Reading and Conference. The following reading and conference topic is scheduled on a regular basis with the Department Head. Other topics and credits may be arranged to fit individual requirements.
Dance Literature. A critical evaluation of dance literature or literature relating dance to other arts, theater, education, anthropology, and therapy.
D 506. Special Problems. Credit hours to be arranged. Study of selected problems in the field of the dance. Consent of the Dean is required.
D 507. Seminar. Credit hours to be arranged. The following seminar topics have been offered. Other topics and credit may be arranged as interest and faculty assignments permit.
Classical Dances of the Orient. Descutner. Mexican Song and Dance. Hearn. Balkan Music and Dance. Hearn.
Native American Dance Cultures. Descutner. Dance in Literature and the Arts. Descutner. Folk Dance Literature. Duke.
D 508. Workshop. Credit hours to be arranged.
D 509. Practicum. Credit hours to be arranged.
D 593. Aesthetic Bases for Dance in Art and Education. 3 credit hours. Dance as an art form ; function of the dance in the changing social milieu.

## Health Education

## Faculty

Richard G. Schlaadt, Ed.D., Department Head, Professor of Health Education (school health instruction, drug education, student teaching). B.S., Lewis and Clark, 1957 ; M.S., Illiniois, 1958; Ed.D., Oregon State, 1966.

Geral Dene Burdman, Ph.D., Assistant Professor of Health Education (community health, aging). B.S., World University, Puerto Rico, 1968 ; M.Ed., Puerto Rico, 1970 ; Ph.D., Oregon, 1973.

Lorraine G. Davis, Ph.D., Associate Professor of Health Education (statistics, curriculum). B.S., 1965, M.S., 1967, Wisconsin-Lacrosse ; Ph.D., Oregon, 1972.
Leonard D. Jacobson, M.D., Adjunct Associate Professor of Health Education (diseases, nutrition, drugs). B.A., 1937, M.D., 1941, Oregon.
Robert E. Kime, Ph.D., Professor of Health Education (sex education, consumer health). B.S., 1954, M.S., 1958, Wisconsin-LaCrosse ; Ph.D., Ohio State, 1963.
Buster E. Pruitt, Ed.D., Assistant Professor of Health Education (school health education, teacher training). B.S., Texas, Austin, 1970; M.Ed., Southwest Texas State, 1971; Ed.D., North Texas State, 1975.
Linda A. Kroeger, M.S., Assistant Professor of Health Education (first aid, personal health). B.S., 1970, M.S., 1972, Indiana State.
Warren E. Smith, Ed.D., Professor of Health Education (world health, safety). B.S., Oregon, 1941; M.A., Michigan, 1947 ; Ed.D., Stanford, 1957.
Maryaret J. Wiese, M.A., Associate Professor of Health Education (foods and nutrition). B.S., Iowa State, 1941 ; M.A., Iowa, 1945.

## Faculty Emeriti

Emil D. Furrer, M.D., Professor Emeritus of Health Education, B.A., 1926, M.D., 1929, Oregon ; at Oregon since 1947.
Franklin B. Haar, Ph.D., Professor Emeritus of Health Education (public health administration). B.P.E., Springfield, 1928; M.A., 1933, Ph.D., 1946, Pittsburgh ; at Oregon since 1949.
Frances VanVoorhis, M.S., Assistant Professor Emerita of Home Economics. B.S., Minnesota, 1932 ; M.S., Iowa State, 1949 ; at Oregon since 1944. Mabel Wood, M.S., Professor Emerita of Home Economics. B.S., Oregon

State, 1925 ; M.S., Columbia, 1930 ; at Oregon since 1932.

The Department of Health Education was officially established at the University of Oregon in 1947, although courses for the health education of students have been continuously offered since 1893. The major aim of Health education is to help people understand what their health needs are and how to meet these needs as individuals and as members of a family, community, nation, and world.

The Department offers a variety of courses necessary for professional preparation for undergraduate and graduate students as well as for the fulfillment of the University's Health Education requirement for graduation. Courses which fulfill this requirement are identified in the course descriptions. The requirement may also be fulfilled, but with no credit granted, by students who successfully pass a Health Education examination administered by the department during each registration period.

The health-career industry is the second largest employer in the United States, and health education graduates are qualified for a variety of positions in an ever-increasing health-related career market. Typical opportunities are : health education teachers in elementary and secondary schools, community colleges, four-year colleges, and universities ; school health coordinators for individual schools and school districts; school health nurses; health career teachers in public schools ; state school health specialists; community health educators with public health departments, voluntary agencies, hospitals, and similar institutions; health research and statistics; and athletic trainer.

The Oregon Student Association for the Advancement of Health Education: The Oregon Student Association for the Advancement of Health Education (OSAAHE) is an organization of health education majors at the University of Oregon. The organization, the first of its type in the state of Oregon, exists for a variety of purposes, all of which recognize health education as both a process and a program and seek to preserve and improve the profession through services to students, faculty, community and the profession itself. Activities such as student advisers, student representation at faculty meetings, newsletter, and social events are among those sponsored by OSAAHE. For membership information, please see the department secretary.

The Health Faire: The health faire is an annual presentation by the Department of Health Education and its students providing an opportunity for agencies and individuals from the campus and community to present their healthrelated services to the total student body of the University of Oregon. Screening examinations, educational slide presentations, and question-andanswer sessions are among the many activities conducted at the faire.
Scholarships: The department of health education offers three modest scholarships in honor of esteemed faculty members no longer active as instructors at the University of Oregon. Information on and applications for the Darwin Gillespie Scholarship, the Franklin Haar Scholarship, and the Antoinette Shumway Stanton Scholarship are available in the main office of the Department of Health Education.
Drug Information Center: The Drug Information Center is an information-and-education resource center affiliated with the Department of Health Education. Services are provided to inform and promote safe and responsible usage behaviors in today's vast drug technology. Among the various services available at the Drug Information Center are telephone and walk-in library and reference services, drug identification services, and educational outreach services.
The DIC is a member of the National Drug Abuse Communication Network (DRACON) with the National Institute of Drug Abuse (NITA) and a member of the state of Oregon ECO-CENTER Alcohol and Drug Resource Sharing Network. In addition, the DIC has received a national commendation for being a replicable primary prevention drug abuse program.

## Undergraduate Studies

A major program of undergraduate study is offered for students who want to specialize in health education. Either a Bachelor of Science or a Bachelor of Arts degree is obtainable. Excellent vocational opportunities are available in schools and with public and voluntary health agencies for persons with professional training in health education. The curriculum provides a strong basis for further graduate work in health education, public health, physical therapy, traffic safety, and the health sciences.
Health education students are expected to assimilate information and
obtain competence in the social sciences, physical sciences, and communication. A graduate is often called on to put the knowledge gained into practice via explanation and practical experiences with people. Graduates of the school have held positions as elementary and high school teachers of health education, coordinators of health education, community health educators, sanitarians, and health administrators at federal, state, and local levels.
Preparation advisable for entering students: Entering freshmen with strong scientific backgrounds will have a particular advantage as they enroll in courses of depth in chemistry and biology. Students who attend community colleges prior to entering the Department of Health Education at the University of Oregon should take as many of the basic lower-division requirements as possible. The specific courses are listed in the respective program explanations.
Admission Procedures and Academic Advising: Upon entering the University, a student may declare Health Education as a premajor area of study. A faculty adviser is assigned to each student. When the lower-division courses are completed, the student is then eligible to apply for major status. An application is fled with the Department and includes transcripts, references, and a comprehensive statement of professional goals. The applicant is admitted to major status in Health Education only after the faculty have reviewed and approved the application.

## Requirements for the Baccalaureate

Degree: Candidates for the baccalaureate degree with a major in health education must satisfy all the general requirements of the University (see page 7), elect appropriate courses in related areas and complete the
professional course requirements of the Department of Health Education in one of the following programs: school health; comprehensive health educator ; community health ; gerontology ; medical technology. In addition, several options are available. Students should also refer to the grading system (undergraduate) on page 6 for pertinent information regarding the grading requirements essential for the baccalaureate degree.

The department as a general rule accepts the grading guidelines as set forth, but reserves the right to evaluate individually the quality of any D grade awarded in a professional course regarding the meeting of minimum satisfactory expectations for the course.
Freshman and Sophomore Years: Students usually complete 15 to 17 credits per term and in conference with an adviser choose courses from the requirements in the accompanying list of core requirements.
Junior and Senior Years: The curriculum is designed to provide professional proficiencies required by each of the options in Health Education. Requirements specific for each option are included in the following section.
School Health Education: The Department of Health Education offers a course of study to prepare students to teach Health Education in Oregon public schools. Two programs are offered, one designed to prepare teachers of Health Education at any of the grade levels, K-12, the other to prepare Health Education teachers for the middle, junior, or senior high school levels. The latter program also requires completion of teaching endorsement preparation in one of four related fields, i.e., Biology, Physical Education, Social Studies or Home Economics
(Home Economics is not offered at the

University of Oregon.) The Department offers work to prepare teachers for the initial or Basic teaching endorsement, and for the standard endorsement. Certification as a teacher of Health Education requires successful completion of a program of teacher education which includes preparation in Health and related subject matter, and in professional education, plus the recommendation of the institution in which the preparation was completed. The University's programs to prepare people for the Health Education teaching endorsements are subject to revision to meet changes in certification requirements mandated by the Oregon Teacher Standards and Practices Commission effective January 1, 1980. For specific information regarding Department requirements for the teaching endorsement, students should consult the Departmental Norm Adviser for Teacher Education, and the Office of Secondary Education in the College of Education.
Basic Teaching Certificate in Health Education (K-12): A basic teaching certificate in health education provides entry level credentials to individuals seeking employment as a teacher of health education in the public schools. The preparation includes exposure to the interdisciplinary nature of health from a biological, physical, emotional, intellectual, and social perspective. Upon completion of the program, teaching competence will be developed in the following areas: personal health, including personal health problems, nutrition, and common diseases ; community health, including environmental health, consumer health, and health careers; mental health, including human behavior, family life, sexuality, and drugs; and safe living, including areas concerned with school and home safety, and first aid.

Core requirements for all programs in Health Education except Medical Technology:

| Course Title | Credits |
| :---: | :---: |
| Written English (Wr 121 and 122 or 122 and 123) |  |
| Physical Education | 5 |
| Nutrition (HE 252) | 3 |
| Personal Health (HE 250) | 3 |
| Chemistry (Ch 101, 102, 103) | 12 |
| Biology (human or animal*) | 9-12 |
| Group I (Recommended: Fundamentals of Speech Communications RhCm 121) | 9 |
| Group II (Including Sociology 201*, Psychology 216*, Anthropology 103*) | 9 |
| Recommended courses |  |

Additional Core Requirements for the following programs :
School of Health, Comprehensive, Community Health, Gerontology

| Course Title | Credits |
| :---: | :---: |
| Personal Health/Human Sexuality (HE 199) |  |
| First Aid (HE 260) |  |
| School and Community Health (HE 351) | 3 |
| Pathophysiology (HE 352) | 3 |
| Community Health Problems (HE 353) | 3 |
| Accident Prevention and Safety Programs (HE 361) |  |
| Introduction to Public Health (HE 371) |  |
| Evaluation Procedures in Health (HE 431) | 3 |
| School Health Programs (HE 442) |  |
| Social Health (HE 451) | 3 |
| Drugs in Society (HE 453) | 3 |
| Environmental Health (HE 454) | 3 |
| Health Care Delivery and Consumer Health (HE 406) ...... |  |
| Practicum (HE 409) | - |
| Human Physiology (Bi 321, 322) | 6 |
| Human Anatomy (Bi 391, 392) | 6 |
| Bacteriology ( $\mathrm{Bi} 381,383$ ) |  |



## Standard Teaching Certificate in

 Health Education: The standard teaching certificate in health education is primarily an upper-division or graduate course of study designed to expand the teaching competence developed in preprofessional teacher preparation programs. A minimum of 12 credit hours of course work must be selected from the graduate offerings (including HE 543 Advanced Health Education) of the Department of Health Education. Courses should be selected from those designed to further teaching competence. The remainder of course work required for a Standard Teaching Certificate in Health Education must be selected from the offerings of the College of Education and with the approval of the Office of Secondary Education. For specific information regarding the requirements for a standard teaching endorsement, students should consult the Office of Secondary Education, College of Education.Basic Teaching Certificate in Combination with Health Education ( $K-12$ ): Combined certification is offered only in combination with another related area such as biology, physical education, social science, etc. Supervised student teaching is required in both areas. The Department of Health Education must approve this program which includes:
Demonstrated competence or 34 term hours of health education designed to
develop teacher competency through experiences in each of the following areas:
(a) Personal Health, including Personial Health (HE 250) 3 credit hours; Nutrition (HE 252 or HE 225) 3 credit hours; and Pathophysiology (HE 352) 3 credit hours;
(b) Community Health, including Community Health (HE 353 or HE 472G) 3 credit hours; or Introduction to Public Health (HE 371 or HE 372) 3 credit hours;
(c) Mental Health, including School and Community Mental Health (HE 351) 3 credit hours; Social Health (HE 451G) 3 credit hours ; Drugs in Society (HE 453G) ;
(d) Safe Living, including First Aid (HE 260) 3 credit hours and Accident Prevention and Safety Programs (HE 361) 3 credit hours;
(e) School Health Program, including Health Instruction (HE 441G) 4 credit hours and School Health Programs (HE 442G) 3 credit hours.

## Standard Teaching Certificate in

 Combination with Health Education: Same as the Standard Certificate in Health Education; however, one additional course, School Health Coordinator (HE 443G) may also be included in the selection of 12 credit hours designed to further health teaching competence.Comprehensive Health Educator: The Comprehensive Health Educator will be well qualified and eligible to teach health education in kindergarten through twelfth grade (K-12) ; function in a variety of community health services.
This broad option is structured to enhance the experiences and increase employment opportunities for students. It includes a wide variety of school and community health courses, a community health practicum with on-the-job experience, a pre-student teaching field experience with school age children, and student teaching.

The requirements in this option include courses listed in the core, those listed under the Basic Teaching Certificate, and the following :

| Course Title | redits |
| :---: | :---: |
| Gero 480 Perspectives in Aging ....... | 3 |
| Approved Community Course |  |
| One of the following: ............... |  |
| HE 472 Community Health Programs or |  |
| Approved Community Course (across campus) |  |
| HE 409 Community Field |  |
| Experience .............. |  |

Community Health: The community health program is designed to provide career mobility for people with allied health certification. It is an option only for those persons who have completed training in fields such as nursing, dental hygiene, respiratory therapy, and the like. Graduates of the program seek employment in departments of public health, voluntary agencies, and other helping professions.
The requirements in addition to those previously listed in the core include:
Course Title
HE 472 Community Health
Programs
3
2 Approved Community Courses (across campus) 6
Gero 480 Perspectives in Aging .................... 3
HE 409 Community Field
Experience .................................... 12
Upper-Division Concentration in
Related Field 12
Gerontology: Health education majors may elect an option in gerontology. The gerontology option is particularly relevant for students interested in community health ; however, elementary and secondary school health educators are increasingly expected to be familiar with life-span developmental processes, including the aging process.

The gerontology option is satisfied as the student (1) completes the basic health education requirements, and (2) completes the following requirements: Perspectives in Aging (Gero 480G) 3 credit hours; Psychology of Aging (Gero 482G) 3 credit hours; Sociology of Aging (Gero 483G) 3 credit hours; Practicum in Human Aging (Gero 409) 15 credit hours; Field Theory Integration Seminar (Gero 407) 1 credit hour ; Mental Health and Aging (HE 406G) 3 credit hours; Health-Related Aspects of Aging (HE 407G) 3 credit hours; Social Dimensions of Leisure and Retirement (RPM 467G) 3 credit hours; Organization of Senior Leisure Services (RPM 468G) 3 credit hours; Media Laboratory in Gerontology (Tc 407G) 3 credit hours; plus 6 credit hours of gerontology electives.

The health education student electing the gerontology option normally will begin the study of gerontology in the sophomore year, with Gero 480(G) Perspectives in Aging. The heaviest concentration of work in gerontology courses comes in the junior and senior years.
Athletic Trainer Option: Health education majors who intend to become certified teachers may also arrange their program to fit the approved academic curriculum of the National Athletic Trainer Association. Certified health
education teachers who have completed the athletic training curriculum are eligible to become certified athletic trainers by successfully passing the National Athletic Trainers Association certification examination after graduation.
Prephysical Therapy: Students electing to major in health education during their preprofessional work may choose to pursue the school health option, the community health option, or the comprehensive program. Students may also elect to pursue the athletic training curriculum leading to certification by National Athletic Trainers Association.

In addition to the basic health education requirements, students are required to take a full year's sequence of essentials of physics or general physics. Depending upon various entrance requirements of individual physical therapy programs, students may need additional courses in either abnormal psychology or elementary statistics or both.
Safety Education and Driver-Education Option: The safety education and driver-education option for undergraduates and graduate-support areas is designed to prepare students for careers as safety and driver-education instructors for schools, communities, public and private agencies, and institutions, Emphasis is on the development of competence in organization, administration, and supervision for classroonı and laboratory experience. The student may elect this option in consultation with the Department of Health Education and an academic adviser. Classes are offered in a structured sequence.

A student needs to fulfill all the requirements of one of the health education programs and the following courses: Accident Prevention and Safety Programs (HE 361) 3 credit hours; Driver Education (HE 467) 4 credit hours; Psychophysical Testing in Driver Education (HE 468) 3 credit hours; Field Work or Supervised Student Teaching, 3-9 credit hours.
The graduate area of concentration includes the following courses, a total of 21-30 credit hours : Administration and Supervision of Safety Programs (HE 560 ) 3 credit hours; Psychology of Accident Prevention (HE 561) 3 credit hours ; Administration and Supervision of Driver Education Programs (HE 562) 3 credit hours; Problems in Traffic Safety (HE 563) 3 credit hours ; Social Psychology (Psy 437G) 3 credit hours; Research (HE 501) $3-6$ credit hours; Thesis (HE 503) 3-9 credit hours.

An additional number of appropriate electives are available in Education and Psychology and may be included in the option.

## Basic Driver Education Combined

 Endorsement: The Department of Health Education also offers a program to prepare Driver Education teachers for the public high schools. Persons wanting to qualify for the Driver Education endorsement on their teaching certificates must also qualify for a teaching endorsement in a subject matter field. For specific additional information regarding Department requirements for the Driver Education endorsement, students should consult the Norm Adviser for Teacher Education in the Department of Health Education.Certification requires demonstrated competence of 12 term hours, including First Aid (HE 260) ; Accident Prevention and Safety (HE 361) ; Driver Education (HE 467) ; and Psychology of Accident Prevention (HE 561).

Dental Hygiene: Predental hygiene students follow a two-year program before admission to the Dental School. During this period, students must complete all general University requirements for any degree and specifically three terms of general biology (human or animal), three terms of general or elementary chemistry, two terms of composition, three terms of social psychology ( $214,215,216$ ), as well as introduction to sociology, nutrition, and speech. All predental hygiene students planning to transfer to the Dental School must take all courses for a grade.

Many predental hygiene students elect to undertake a program of study leading to a Bachelor of Science degree in Health Education at the University of Oregon in conjunction with dental hygiene which will broaden their career possibilities in education or community health. All predental hygiene advising is conducted by the Department of Health Education.
Medical Technology: The University offers a four-year program in Medical Technology, leading to a baccalaureate degree. The program offers two options: (1) complete three years of study on the Eugene campus and then apply to the University of Oregon Health Sciences Center at Portland to complete the fourth year for a baccalaureate degree ; or (2) complete a baccalaureate degree in the College of Arts and Sciences (emphasis in General Science, Biology, Chemistry, or other) and apply to Sacred Heart Hospital in

Eugene to work in the Medical Technology program. A certificate is awarded upon the completion of the Medical Technology program at Sacred Heart in Eugene.

Students interested in applying to the University of Oregon Health Science Center in Portland need to (1) complete all general University degree requirements for majors in professional schools that cannot be satisfied with work taken at the School of Medicine and (2) the special science requirements for admission to the School of Medicine.

The following courses satisfy the science requirements:
(1) Chemistry

General Chemistry (Ch 104, 105, 106)
and labs (Ch 107, 108, 109)
Organic Chemistry (Ch 331, 332, 333) and labs (Ch 337, 338)
Quantitative Analysis (Ch 324)
(2) Biology

BI 301, 302, 303 or any three terms of Biology numbered 100-199, 12-15 credits
Introduction to Bacteriology ( Bi 381 , 383), 5 credits

Upper-division Biology, 3 credits
(3) Physics

Any three terms of physics numbered 100-199, 9 credits
(4) Mathematics

12 credit hours, including Math 101 or equivalent skills
All inquiries regarding the program should be directed to Dr. Bayard McConnaughy, Biology Department, or Marliss Strange, Academic Advising.

## Graduate Studies

Graduate studies offered by the Department of Health Education include work toward the following degrees: Master of Arts, Master of Science, Doctor of Philosophy, and Doctor of Education. The emphasis within the department at the graduate level is in school-health education. The community-health education option is available only to those persons with allied health certification.

## Master's Degree in Health Education

 Admission Procedure and Requirements: An application must include the items listed below and sent as indicated. All materials must be received before the Health Education graduate faculty can act upon an application. They will consider each item with the appropriate criteria.Send to:
Department Head
Department of Health Education
University of Oregon
Eugene, Oregon 97403
(1) One set of official transcripts of all college work (cumulative GPA 2.75)
(2) All copies of graduate application except top green copy
(3) Three recommendations
(4) Miller Analogies Test (35) or

Graduate Record Examination (470 verbal) test results
(5) Vita outlining work and educational experiences
(6) A statement of purpose outlining why the candidate intends to pursue a master's degree in health education.

Send to:
Director of Admissions
University of Oregon
Post Office Box 3237
Eugene, Oregon 97403
(1) One set of official transcripts of all college work
(2) Green copy of graduate application plus $\$ 10$ fee. Applicants who have previously attended the University of Oregon are not required to pay the $\$ 10.00$ fee.

## Course Prerequisites to Degree

 Candidacy: A candidate for a degree in health education must have satisfactorily completed the following undergraduate courses : three terms each of biology (or zoology), psychology and chemistry ; two terms each of physiology and anatomy; and one term each of bacteriology, first aid, safety education, personal health, community health problems (or communicable disease), nutrition, public health, mental health, social health, health instruction, school health services, and administration of schol health education. These deficiences may be removed with appropriate undergraduate or graduate courses.A candidate must also have completed student teaching or have a certificate or degree in an allied health field.
Assignment to Adviser: Prior to the students first registration for course work, they consult with the Head of the Department for an evaluation of their transcripts and for the assignment of an adviser. Students then consult with the adviser to discuss the merits of the various degree plans and to work out a program of studies.

## The Master's Degree

Advancement to Candidacy: All students are admitted on a conditional
basis. After a student has completed at least 12 hours of graduate work on the University campus, the student will be advanced to candidacy for the master's degree providing the following qualifications have been met: (1) a grade point average of at least 3.0 for all of the graduate work taken at the University; (2) removal of any deficiencies; (3) recommendation by the Health Education faculty.
The graduate faculty will review the files of students for advancement to candidacy at the end of each term.
Selection-of-Degree Plan: Two degree plans are offered: with thesis or with comprehensive examinations. Both plans require:
(1) A minimum of 45 hours of graduate work. A maximum of 15 hours may be transferred from other accredited colleges or universities if they are accepted by the department and the graduate school. A minimum of 24 hours must be taken at the University of Oregon, 9 of which must be at the 500 level.
(2) HE 521 Research Methods in Health, HE 431(G) Evaluation Procedures in Health (or equivalent), and HE 531 Fundamentals of Statistics in Health, 3 hours each.
(3) A concentration outside of the College of Health, Physical Education and Recreation consisting of a minimum 9 credit hours ( 12 hours recommended). (This requirement may be waived for foreign students).
To complete the master's degree with comprehensive exams, the candidate must also complete a minimum of 24 hours graduate work in health education selected from courses numbered 400499 (G), and 500-599.

## Ph.D., or D.Ed. Degree in <br> Health Education

General Information: Doctor's degrees are granted primarily for attainments and proven ability. Requirements of time and credit are secondary; but no candidate will be recommended for the degree until the mininum requirements of residence and study have been satisfied. At least two years of full-time study beyond the master's degree are generally required, of which at least one year (three consecutive terms) must be spent in residence on the Eugene campus of the University of Oregon.
A student whose academic work includes both the baccalaureate and master's degree from the Health

Education Department at the University of Oregon usually will not be admitted into the doctoral program.
Conditional Admission Requirements and Procedures for the Doctoral Program: Applicants must (1) Score a minimum of 50 on the Miller Analogies Test or 525 verbal score on the Aptitude Phase of the Graduate Record Examination.
(2) Have at least two years of fulltime, paid experience in the health area. Graduate teaching assistantships cannot be used to fulfill this requirement.
(3) Show evidence of a high level of intellectual competence and a satisfactory background in general education. The quality and recency of previous academic work will be considered in the evaluation of the candidate's transcript.

If the candidate meets departmental requirements, conditional admission is granted. Full admission will be granted after satisfactorily passing the Doctoral Qualifying Examination and being accepted into the doctoral degree program by the Graduate Faculty of the College of Health, Physical Education and Recreation. Upon arrival at the University, the candidate reports to the Graduate Coordinator to be interviewed and assigned a temporary adviser to work out a program of studies for the first term.

An application must include the items listed below and sent as indicated. All materials must be received before the Health Education graduate faculty can review an application for admission.
Send to:
Department Head
Department of Health Education
University of Oregon
Eugene, Oregon 97403
(1) One set of official transcripts of all college work
(2) All copies of graduate application except top green copy
(3) Five recommendations including a letter from both the last academic adviser and the last, or current, employer
(4) MAT or GRE test results (5) Vita outlining work and educational experiences
(6) A statement of purpose outlining why the candidate intends to pursue a doctorate in health education
Send to:
Director of Admissions
University of Oregon
Post Office Box 3237
Eugene, Oregon 97403
(1) One set of official transcripts of all college work
(2) Green copy of graduate application plus $\$ 10$ fee.

Qualifying Examination: The student is required to take a qualifying examination as early as possible after enrolling in the College. This should be done during the first term and must be done before completion of the third term of the program. The examination consists of two major parts:
(1) Objective section. It is intended that the objective section of the examination will be used in evaluating the student's academic and professional background and in searching for weaknesses in this background.

Students majoring in health education will take a departmental examination which will deal with personal health problems, community health problems; first aid and safety, anatomy and physiology, diseases, nutrition drugs, family health and mental health. (2) Essay section. The purposes of the essay section of the examination are to evaluate the students use of English, facility in formulating thought, and the ability to deal with professional problems. Students will be required to answer at least two comprehensive questions which will be graded by a committee representing the graduate faculty.
Evaluation by Graduate Faculty: The Graduate Faculty of the College of Health, Physical Education, and Recreation will consider the qualification of each student, individually, following the completion of the qualifying examination. They may recommend that the candidate be admitted to the doctoral program, postpone admittance, or they may reject the application. A recommendation, in written form, will be given to each student at the end of the term in which the examination is completed.

The result of the qualifying examination will be considered in determining the student's purposes. If the student is admitted to the doctoral program, any deficiences identified in the qualifying examination may be removed by enrolling in designated courses or by other means satisfactory to the adviser.
Course Prerequisites to Degree Candidacy: A student who seeks a doctor's degree in the College of Health, Physica Education, and Recreation must have completed specified undergraduate courses or their equivalent. A student who has not completed these courses as an undergraduate must take them, or substitutes for them, as approved by the student's advisory committee, either for credit or as an auditor. Any
student enrolling in a graduate course offered by the College must meet the prerequisite for the course.
Components of the Doctoral Program: The doctoral program in Health Education at the University of Oregon is generally considered to be a two-year program. The time factor may vary because of approved transfer credit, deficiencies, and other individual differences. The program is individually designed to meet the needs and future expectations of each candidate. Although no specific total hour requirement has been established by the Graduate School, a program is generally designed around the basic distribution of hours as follows:
(1) Area of Specialization (Health Education), approximately 30 credit hours (including 15 hours at the University of Oregon)
(2) Supporting Area (Ph.D.), approximately 20 hours
Supporting Area (Ed.D.), Education, approximately 30 hours; Other than Education, approximately 20 hours (Note: if area other than education is selected, an additional 20 hour minimum in education is required).
(3) Research and Statistics, approximately 12 hours
(4) Thesis, minimum of 27 hours
(5) Cognate (Electives) ; Ph.D., approximately 25 hours; Ed.D., approximately 15 hours.

Course work completed for a master's degree may be credited to the program. Up to 9 hours may be credited for the master's thesis. If a thesis has not been completed an In-Lieu Thesis must be presented and approved by the department prior to being advanced to candidacy. Up to 9 hours of credit may be applied to the dissertation component of the programs for this project.

## Service Courses

HE 150. Health Education. 2 credit hours. Study of personal health problems which confront the college student ; the basic scientific principles of healthful living. Satisfies University health education requirement.
HE 199. Special Studies. 1-3 credit hours.
The following special study topics are arranged for the credits noted. All satisfy the University health-education requirement. Personal Health and Human Sexuality. 3 credit hours. Pruitt.
Consumer Health. 3 credit hours.
Environmental Health. 3 credit hours. Personal Nutrition and Health. 3 credit hours. Wiese.
HE 211. Community Health. 3 credit hours. Methods of handling health and sanitation problems in the community, with special reference to water supply, food and milk sanitation, sewage disposal, insect and rodent
control ; state and county health departments. Satisfies University health-education requirement. Burdman.
HE 250. Personal Health. 3 credit hours. Study of the personal health problems of university men and women, with emphasis on implications for family life. Mental health, communicable diseases, degenerative diseases, nutrition. Satisfies the University requirement in health education for men or women.
HE 252. Nutrition. 3 credit hours. The relationship of food to health with emphasis on the young adult. Introduction to nutrients, their functions, sources, and requirements. Discussion of current dietary trends and their implications for health. Wiese.
HE 260. First Aid. 3 credit hours. Immediate and temporary care for a wide variety of injuries and sudden illnesses ; control of bleeding, respiratory emergencies, burns, poisoning, shock, and proper methods of transportation, splinting and bandaging. Successful completion of course leads to Red Cross Standard First Aid and Personal Safety or Advanced First Aid and Emergency Care Certificates. Kroeger.

## Professional Courses

HE 351. School and Community Mental Health. 3 credit hours fall. Designed for school and community health educators, allied health personnel, and others interested in an overview of the mental health movement, the scope of the problem, and school and community programs designed to alleviate these problems and foster better mental health. Prerequisite: HE 250 . Smith.
HE 352. Pathophysiology. 3 credit hours winter. Nature, prevention, and control of common communicable and noncommunicable diseases. Prerequisite : biology and chemistry or general chemistry. Jacobson.
HE 353. Community Health Problems. 3 credit hours winter, spring. Exploration and examination of the agencies and programs involved in community health, basic commu-nity-health problems, the problems and issues involved, and how these problems can be solved. Prerequisite: HE 250. Burdman.
HE 361. Accident Prevention and Safety Programs. 3 credit hours winter, spring. Analysis of accident cause and prevention: epidemiology; principles and inistruction of accident loss reduction; problems and psychology of accident behavior and prevention. Smith, Kroeger.
HE 371. Introduction to Public Health. 3 credit hours fall. Functions and organization of public and voluntary health agencies and programs at the national, state, and local level. Prerequisite : HE 250. Burdman.
HE 405. Reading and Conference. Credit hours to be arranged.
HE 409. Practicum. Credit hours to be arranged. College and health-related service agencies.
HE 461. Instructor First Aid. 3 credit hours. Develops individual teaching techniques for standard First Aid and Personal Safety instructors. Resource development and application emphasized. Successful completion of course leads to ARC Instructor Authorization. Prerequisite: HE 260.
Kroeger.

## Upper-Division Courses Carrying Graduate Credit

HE 406. Special Problems. (G) 3 credit hours.

Mental Health and Aging. (G) 3 credit hours. Mental health needs of the elderly, biological and social factors in mental health and aging, mental ând emotional problems in later life, treatment of mental disorders, alternatives of institutionalization and special needs of institutionalized elderly. The role of the professionals and para-professionals in meeting the mental health needs of the elderly and current programs and processes relating to the delivery of mental health services to older people. Burdman.

## HE 407. Seminar.

Health Aspects of Aging. (G) 3 credit hours spring. Theories involving changes in structure and performance are presented in relation to environmental and physical effects on aging; emphasis on demographic aspects of aging; normal aging changes and deviations of the normal aging process (pathophysiology); relationship between mental and physical health; health maintenance ; community health; and aging research.
HE 408. Workshop. (G) Credit hours to be arranged.
HE 431. Evaluation Procedures in Health. (G) 3 credit hours spring: An introduction to fundamental procedures in collection, summarization, presentation and basic analysis of health data. Test construction and techniques of evaluation is included. Davis.
HE 440. Elementary-School Health Education. (g) 3 credit hours. Orients the teacher to the broad health field, the principles and procedures of or ganizing and administering the school health program, including the health services and the healthful school environment. Special attention to significant health problems and development of health instruction through the introduction of recent content, methods, and materials. Davis, Schlaadt, Smith. Satisfies the University health-education requirement for elementary education majors.
HE 441. Health Instruction. (G) 4 credit hours fall, winter, spring. Designed to prepare elementary and secondary teachers to develop and implement effective health instruction programs. The course will employ the latest methodology and health materials to assist teachers in offering quality health education courses. Prerequisites or concurrently: HE 351, 352, and 353. Schlaadt, Pruitt.
HE 442. School Health Programs. (G) 3 credit hours fall. Concentrated study of provisions for health services in both school and community settings; school health programs; administration and implementation of services examining the role of the schools and health agencies. Prerequisite: HE 351, 352, 353 or consent of instructor. Kroeger, Smith.
HE 443. School Health Coordinator. (G) 3 credit hours. Prepares teachers to serve effectively as school health coordinators. Emphasis on school health program coordination, service as a liaison between school, home, and community health agencies. Prerequisite: HE 441, HE 442, or concurrent registration. Schlaadt, Pruitt.
HE 451. Social Health. (G) 3 credit hours fall, winter. Physical, mental, emotional, and social phases of human relations as they are affected by male and female sexuality. Implications for sex education programs in schools andcommunities. Kime.
HE 453. Drugs in Society. (G) 3 credit hours winter. Designed to assist teachers to gain a solid knowledge and background on drugs, and to teach effectively on the subject. No prerequisites. Schlaadt.
HE 454. Environmental Health. (G). 3 credit hours. An in-depth view of the interrelationship of environmental systems (land,
air, water, industry) and their effects on individuals and communities. Stoner.
HE 467. Driver Education. 4 credit hours spring. Designed to prepare teachers to conduct driver-education courses in the secondary schools. Use of teaching devices, development of instructional units, behind-the-wheel instruction. Schlaadt, Kime.

## HE 468. Psychophysical Testing Equip-

 ment in Driver Education. (G) 3 credit hours. Instruction for driver-education teachers in the use of driver simulation, psychophysical testing, and multi-media equipment.
## HE 472. Community Health Programs.

 (G) 3 credit hours. Prepares community health educators to work effectively within the community health programs. Emphasis on the principles of epidemiology, community organization program planning, community health education tools, and evaluation of community health programs. Prerequisite : HE 371, 372, 373. Bobst.
## Graduate Courses

HE 501. Research. Credit hours to be arranged. No-grade course.
HE 503. Thesis. Credit hours to be arranged. No-grade course.
HE 505. Reading and Conference. Credit hours to be arranged.
HE 506. Special Problems. Credit hours to be arranged.
HE 507. Seminar. The following four seminar topics are scheduled with credits as noted.
Advanced Statistics in Health. 3 credit hours spring. Designed to prepare Health Education professionals to plan appropriate research and evaluate the results; emphasis on advanced techniques analysis. Prerequisite: HE 507 Fundamentals of Statistics in Health.

## Davis.

## Experimental Design and Nonparametric

 Procedures in Health. 3 credit hours. Prepares Health Education professionals with tools to plan and analyze research problems utilizing correlational techniques and nonparametric approaches to data in health. A culminating course to encompass and summarize biostatistics and treatment of healthrelated data. Prerequisite: HE 507 Adyanced Statistics in Health or equivalent. Davis.
## Psychopharmacology. 3 credit hours

 spring. The essential facts and theories relating to the current social, psychological, and medical implications of drug misuse in our society. Emphasis on important preventive aspects of drug-induced abnormal behavior. Background of biology, chemistry, physiology, psychology, and sociology helpful. Jacobson. Community Health Administration. 3 credit hours. Health agencies are examined for their influence upon the health needs to the community and transformation into social, political, and economic demands for utilization of manpower, facilities, and other resources in the provision of health services at various levels of the community.HE 509. Practicum. Credit hours, time, and place to be ar ranged.
Health Teaching, College-Level.
Health-related Services Agencies.
HE 521. Research Methods in Health. 3 credit hours winter. Research design, sample selection, questionnaire construction, interviewing techniques, the interpretation and presentation of data and related facets of health research. Prerequisite: HE 373, 431 or consent of instructor. Davis.
HE 531. Fundamentals of Statistics in
Health. 3 credit hours. Designed to prepare
students to plan the collection of data, as well as to present and analyze health information and related data. Prerequisite : HE 431 or equivalent. Davis.

## HE 541. Philosophy and Curriculum

 Design in Health Education. 3 credit hours. Philosophy, foundations, and principles of curriculum organization for health education at the elementary, secondary, and collegiate levels. Consent of instructor is required. Prerequisite: graduate standing. Kime.
## HE 542. Sex Education. 3 credit hours.

 Designed primarily for teachers; emphasizing curriculum organization, teaching methods, and materials. Prerequisite: HE 451 or equivalent. Kime.
## HE 543. Advanced Health Instruction.

3 credit hours. Basic steps in planning programs for public and school-health education. Consideration of the organization of inservice programs, determination of priorities, and interpretation of roles of school-health coordinators. Schlaadt.
HE 551. Basic Issues in Health Education. 3 credit hours. Current basic issues and problems in health education ; economic and social forces affecting health education; implications for programs. Davis.
HE 552. Administration of Health Programs. 3 credit hours. Analysis of organizational patterns, planning procedures, fiscal and personnel management, public relations, and other administrative concerns such as legal and constituency implications. Smith.

## HE 553. Nutrition in Health and Disease.

 3 credit hours fall. Study of the essential facts and current theories regarding the combination of processes by which living organisms take in and utilize the various nutrients for the maintenance of energy, growth, and repair functions. Emphasis on the preventive aspects of hypernutrition states, deficiency syndromes, brain function and nutrition, and the relationship of nutrition and resistance to all forms of disease states. Prerequisite : background in biology, chemistry, and physiology. Jacobson.HE 554. Progress in Disease Control. 3 credit hours winter. New knowledge discussed by experts actively engaged in various medical and surgical specialties. Prerequisite: anatomy, physiology, and HE 352. Jacobson. HE 560. Administration and Supervision of Safety Programs. 3 credit hours. The organization, development, and implementation of safety programs in schools, communities, and industries. Smith, Kroeger.
HE 561. Psychology of Accident Prevention. 3 credit hours. Characteristics of problem drivers and teenage behavior related to accidents and accident prevention; effective methods in safety education programs. Kime.

## HE 562. Administration and Supervision of

 Driver-Education Programs. 3 credithours. Budgeting, selection and placement of teachers, curriculum development, public relations. Schlaadt.
HE 563. Problems in Traffic Safety. 3 credit hours. Factors in the traffic safety problem; law enforcement, engineering problems, health and medical factors, use of alcohol and drugs by drivers, driver licensing.
HE 571. World Health Problems. 3 credit hours spring. Designed to provide for teachers and health workers information on world health problems and international programs, the World Health Organization and its supporting agencies ; intensive study of a regional health problem in selected countries. Prerequisite : senior or graduate standing. Smith.

University of Oregon Center for Gerontology
Faculty
Frances G. Scott. Plı.D., Director, Professor of Health Education Gerontology (administration, research, adult development). B.A., 1953, M.A., 1954, Texas; Pl.D., California, Los Angeles, 1960.
Susan K. Bettis, Ph.D., Assistant Professor of Health Education (gerontology, counseling, mental health, women's studies). B.S., 1969, M.S., 1970, Ph.D., 1978, Oregon.
Ruth M. Brewer, M.S., Instructor in Health Education Gerontology (gerontology, librarianship). B.S., Washington, 1941 ; M.S., Oregon, 1968.

John Ewing, M.S., Assistant Professor of Health Education Gerontology (gerontology, counseling of students, community service organization). B.A., George Peabody College, 1963 ; M.Div., McCormack Theological Seminary, 1956 ; M.S., Oregon, 1972. Hazel M. Foss, M.A., Assistant Professor of Health Education Gerontology (counseling, community service). B.A., Oregon, 1972 ; M.A., Oregon, 1974.
James H. Lynch, Ph.D., Assistant Professor of Health Education Gerontology (gerontology, preretirement education, counseling). B.A., Portland, 1960 ; M.Ed., 1964, Ph.D., 1976, Oregon.

Donna M. McKenzie, B.S., Instructor in Health Education Gerontology (gerontology, adult education). B.S., Oregon, 1969.
Catherine M. Porter, Ph.D., Assistant Professor of Health Education Gerontology and Educational Psychology (gerontology; human development). B.S., Texas, 1962 ; M.A., Houston, 1966 ; Ph.D., Oregon, 1972.
Executive Committee on Gerontology Carl Carmichael (Speech).
Clarence E. Thurber (Community Service and Public Affairs).
Henry Dizney (Educational Psychology).
A. M. Hanhardt (Political Science). Walter T. Martin (Sociology).
R. E. Kime (Health Education).

Larry L. Neal (Recreation and Park Management).
David A. Sandahl (Architecture). E. F. Scoles (Law).

Norman D. Sundberg (Psychology). Paul Swadener (Finance).

The University of Oregon Center for Gerontology, administratively located
in the Health Education Department, College of Health, Physical Education, and Recreation, is a multidisciplinary instructional program. Gerontology is a supporting area or area of concentration for majors in any relevant University department.

An interdisciplinary core curriculum in gerontology, including field placement or research experience, is required of students electing gerontology as a supporting area. The core curricultum introduces the student to problems of the aging process and permits scholarly development of special interests through either research or field placement or both.

For health education majors, an option in gerontology is offered. Information about the gerontology option in health education may be found on page 276. Students interested in the gerontology option may want to consult Dr. Geral Dene Burdman in the Health Education Department for further details.

The primary focus of the Oregon Center for Gerontology is upon instruction, although research projects are also in progress from time to time. A limited number of graduate research assistantships are sometimes available, as well as an occasional graduate teaching assistantship. Graduate and undergraduate stipends in gerontology are usually available ; the amount of the stipend is dependent upon the certified unmet financial need of the individual student. Application for stipends must be made before April 15 to begin in September of the same year. Information may be obtained from the director.

A complete description of all gerontology courses and seminars, along with the scheduling of courses and instructors' names, is available from the Gerontology Information Resource Center, 1627 Agate Street (telephone 686-4207). This listing is prepared each fall for the forthcoming academic year, and is usually available during the last week of Summer Session.

## Upper-Division Courses Carrying Graduate Credit

Gero 401. Research. (g) Credit hours to be arranged.
Gero 405. Reading and Conference. (g) Credit hours to be arranged.
Gero 406. Special Problems. (g) Credit hours to be arranged
Gero 407. Seminar. (g) Credit hours to be arranged.
Gero 408. Workshop or Laboratory
Projects. (g) Credit hours to be arranged. Gero 409. Practicum. (g) Credit hours to be arranged.
Gero 410. Experimental Course. (g) Credit hours to be arranged.

Gero 480. Perspectives in Aging. (g) 3
credit hours. A survey of problem areas including theories of aging, health and physiological aspects, psychological and psychiatric problems, family and sex roles of the aged, environmental design and retirement housing, leisure and recreation, political movements, the economics of income maintenance, and death. Ewing.
Gero 482. Psychological Aspects of Aging. (g) 3 credit hours. Perception, learning, motivation, intelligence, achievement, personality and other aspects of normal and pathological aging are studied. Students are paired with consultant retired persons both in and out of class to underscore and provide realism to the learn-experience. Porter.
Gero 483. Sociological Aspects of Aging. (g) 3 credit hours. A consideration of some of the structural and behavioral implications of older adulthood in modern society, with particular emphasis upon the social roles and social status of the aged. Scott.
Gero 484. Preretirement Education. (g) 3 credit hours. Preretirement education is viewed as an intervention in a crisis period of adult life. Various models and strategies of counseling preretirees in several problem areas of later life are examined and analyzed. Bettis.
Gero 485. Contemporary Problems in Death Education. (g) 3 credit hours. An inquiry into various issues in dying, death, and bereavement, with attention to existing research, pertinent theory, relevant social organization and processes, and philosophical and ethical questions. Lynch.
Gero 486. Philosophical Aspects of Aging. (g) 3 credit hours. An exploration and evaluation of various philosophies of aging designed to provide insights concerning Western cultural biases about aging and old people. Ewing.

## Graduate Courses

Gero 501. Research. Credit hours to be arranged.
Gero 505. Reading and Conference. Credit hours to be arranged.
Gero 506. Special Problems. Credit hours to be arranged.
Gero 507. Seminar. Credit hours to be arranged.
Gero 508. Workshop. Credit hours to be arranged.
Gero 510. Experimental Course. Credit hours to be arranged.
Gero 502. Supervised College Teaching. Credit hours to be arranged.
Gero 509. Practicum. Credit hours to be arranged.
Gero 580. Personality and Aging. 3 credit hours. The works of various personality theorists are studied with relation to normal and pathological aging. Developmental, psychoanalytic, behavioristic, and social psychological theories discussed. Studies on the social and psychological personality correlates of the life cycle and implications for research examined. A unique long-term longitudinal research project on adult life style and personality studied in depth. Porter.
Gero 581. Confrontations of Death. 3 credit hours. An experiential study which examines feelings and attitudes toward death of others and of one's self. The final sessions include a weekend group experience under the guidance of human relations trainers. Limited to seniors and graduate students; instructor's consent is required. Graded Pass/No-Pass only.

# Physical Education 

## Faculty

Michael J. Ellis, Ph.D., Department Head, Professor of Physical Education (research, play). D.L.C., Loughbrough, 1959 ; M.S., Illinois, 1965 ; Ph.D., Illinois, 1968.
Jack D. Adler, D.Ed., Associate Professor of Physical Education (motor learning). B.A., 1951, M.S., 1960, Washington; D.Ed., Oregon, 1967.
Barry T. Bates, Ph.D., Assistant Professor (biomechanics). B.S.E., Princeton, 1960 ; M.Ed., East Stroudsburg, 1971 ; Ph.D., Indiana, 1973.
Z. Diane Baxter, M.A., Senior

Instructor in Physical Education (golf). B.S., Western Illinois, 1956 : M.A., Colorado State, 1960.

Jeanine Bennett, Ph.D., Assistant Professor of Physical Education (professional preparation). B.A., 1963, M.S., 1968, Washington ; Ph.D., 1975 , Ohio State.
John W. Borchardt, Ph.D., Associate Professor of Physical Education (intramurals). Director of Intramural Sports. B.S., J.aCrosse Teachers, 1940 ; M.A., 1951, Ph.D., 1966, Iowa.

Jan Broekhoff, Ph.D., Professor of Physical Education (research statistics). M.O.P., Academy of Physical Education, The Netherlands, 1958 ; M.S., 1963, Ph.D., 1966, Oregon.

Richard L. Brooks, Ed.M., Professor, Head Football Coach. B.S., 1963, Ed.M., 1964, Oregon State.
William S. Dellinger, M.S., Assistant Professor of Physical Education; Track Coach (track coaching). B.S., 1956, M.S., 1961, Oregon.
Gerald E. DeMers, M.S., Instructor, Diving Coach (acquatics). B.S., 1971, M.A., 1972, Mankato State College.

Eugene Evonuk, Ph.D., Professor of Physical Education (exercise physiology). B.S., 1952, M.S., 1953, Oregon ; Ph.D., Iowa, 1960.
Ronald L. Finley, M.Ed., Assistant Professor of Plysical Education; Wrestling Coach (wrestling coaching). B.S., 1964, M.Ed., 1967, Oregon State.

Elizabeth G. Glover, Ed.D., Assistant Professor of Physical Education (acquatics). B.S., Tufts, 1959 ; M.S., Woman's College, North Carolina, 1963 ; Ed.D., North Carolina, 1974.
James Anthony Haney, B.S., Assistant Professor of Physical Education (basketball coach). B.S., 1971, Pennsylvania.
Henriette Anna Margarete Heiny, M.A., Visiting Instructor (gymnas-
tics ). Diplon Sport Lehrer, 1969, M.A., 1974, University of Cologne. Melvin A. Krause, M.S., Assistant Professor of Physical Education ; Head Baseball Coach (baseball coaching). B.S., 1951, M.S., 1958, Oregon. Betty F. McCue, Ph.D., Associate Dean, Professor of Physical Education (history, philosophy, administration). B.S., Pittsburgh, 1945 ; M.S., MacMurray, 1948; Ph.D., Iowa, 1952. Corlee Munson, Ph.D., Associate Professor of Physical Education (elementary school physical education). B.A., Northwestern Colorado, 1948 ; M.S., Washington, 1956 ; Ph.D., Iowa, 1966. Louis R. Osternig, Ph.D., Associate Professor of Physical Education (exceptional child). B.S., 1965, M.S., 1967, California State, Hayward ; Ph.D., Oregon, 1971.
Kelly D. Rankin, Ed.D., Assistant Professor (elementary school physical education). B.S., Kansas, 1962 ; M.S., Washburn University, 1965 ; Ed.Sp., Kansas State Teachers College, 1970; Ed.D., Kansas, 1975.
Edward R. Reuter, Ph.D., Associate Professor of Physical Education (professional preparation). B.S., Washington State, 1948 ; M.S., 1949, Ph.D., 1957, Illinois.
William P. Rhoda, D.Ed., Associate Dean, Professor of Physical Education (administration). B.S., Pennsylvania State, 1939 ; M.S., 1947, D.Ed., 1951, Oregon.
Karla S. Rice, M.A., Senior Instructor in Physical Education (recreational programs). B.S., Central Michigan, 1962 ; M.A., Michigan State, 1965. Robert J. Ritson, M.A., Instructor (elementary school physical education, track). B.S., Wartburg College, 1969 ; M.A., Northern Iowa, 1974.

James P. Santomier, Ph.D., Assistant Professor (professional preparation). B.E., 1968, M.S., 1969, Montclair State College; Ph.D., U̇tah, 1971. Martha L. Schey, M.A., Instructor in Physical Education (tennis, tennis coach ). B.S., 1968, M.A., 1969. Becky L. Sisley, Ed.D., Associate Professor of Physical Education, Head, Women's Intercollegiate Athletics; B.A., Washington, 1961 ; M.S.P.E., 1964, Ed.D., 1973, North Carolina, Greensboro.
Richard J. Smith, Ph.D., Associate Professor of Physical Education (service program). B.S., 1949, M.Ed., 1953, Springfield; Ph.D., Oregon, 1968.

Larry W. Standifer, B.A., Assistant Professor, Athletic Trainer, Physical

Therapist (athletic injuries). B.A., Willamette, 1955.
C. William Steinmetz, Ph.D., Assistant Professor (anatomy). B.S., Don Bosco College, 1965 ; M.A., 1973, Pl.D., 1975, Ohio State.
Emory F. Summers, Ed.D., Instructor (tennis). B.A., California, 1957; M.A., University of the Pacific, 1963 ; Ed.D., Oregon, 1973.
Richard K. Troxel, B.S., Visiting Instructor, Women's Athletic Trainer. B.S., 1975, Oregon.

Donald P. Van Rossen, Ph.D., Associate Professor of Physical Education, Swimming Coach (sports psychology). B.S., 1953, M.Ed., 1954, Ph.D., 1968, Illinois.
Virginia A. Van Rossen, M.S., Instructor in Physical Education (aquatics). B.A., 1962, M.A., 1969, Oregon.

Edna P. Wooten, Ph.D., Professor of Physical Education (anatomy). B.S., 1945, M.A., 1946, Ph.D., 1961, Ohio

## State.

Lois J. Youngen, Ph.D., Associate Professor of Physical Education (professional preparation). B.S., Kent, 1955 ; M.A., Michigan State, 1957 ; Ph.D., Ohio State, 1971.

## Faculty Emeriti

William J. Bowerman, M.S., Professor Emeritus of Physical Education; Emeritus Assistant Athletic Director. B.S., 1933, M.S., 1951, Oregon ; at Oregon since 1973.
H. Harrison Clarke, Ed.D., Research Professor Emeritus of Physical Education (research). B.S., Springfield, 1925 ; M.S., 1931, Ed.D., 1940, Syracuse; at Oregon since 1953.
Ernesto R. Knollin, M.A., Professor Emeritus of Physical Education (professional preparation). B.A., 1914, M.A., 1929, Stanford ; at Oregon since 1929.
Fred N. Miller, M.D., F.A.C.P., Professor Emeritus of Physical Education (Director of Health Service). B.A., 1914, M.A., 1916, Lafayette ; M.D., 1924, Chicago ; F.A.C.P., 1941, American College of Physicians; at Oregon since 1925.
Marian H. Miller, M.D., Professor Emerita of Physical Education (Assistant University Physician). B.A., 1925, M.D., 1930, Oregon ; at Oregon since 1931.

Jessie L. Puckett, M.S., Professor Emeritus of Physical Education (professional preparation). B.S., 1931, M.S., 1937, Oregon ; at Oregon since 1952.

Peter O. Sigerseth, D.Ed., Ph.D., Professor Emeritus of Physical Education (anatomy). B.A., Minot State Teachers, 1928; M.A., North Dakota, 1936 ; D.Ed., Oregon, 1944 ; Ph.D., Iowa, 1955 ; at Oregon since 1941. Vernon S. Sprague, Ph.D., Professor Emeritus of Physical Education (professional preparation). B.S., Oregon, 1937 ; M.A., 1942, Ph.D., 1951, Michigan ; at Oregon since 1946.
Janet G. Woodruff, M.A., Professor Emerita of Physical Education (administration, service programs). B.S., 1926, M.A., 1929, Columbia ; at Oregon since 1929.

The Department of Physical Education is responsible for service courses in physical education for the general University student, undergraduate and graduate professional preparation and research in physical education, and recreational sports programs for the University community.
Service Courses in Physical Education: These courses are normally taken to meet the five-term University requirement for graduation, although more than five courses may be taken and the credit applied toward the baccalaureate degree. Emphasis in all classes is on learning recreational skills while contributing to the physical, mental, and social development of the individual. Beginning classes are numbered at the 100 -level ; intermediate and advanced courses are numbered at the 300 -level ; either level may be used to satisfy the University requirement. Most classes meet two or three times per week for one credit hour. Students are normally limited to one physical education service class per term because of enrollment limitations; one additional class may be added during late registration. Credit by examination is available in a variety of courses.

One or more terms of the requirement may be waived (waiver does not award credit) under the following circumstances : (1) Health Reasons: The student should request an interview at the Health Center. Medical waivers must be approved by the University Health Service and then submitted to the Department of Physical Education. (2) Military Service: Students who have completed six months of active military service in the Armed Forces are exempt from three terms of the requirement. Official documents must be filed with the Admissions Office. (3) Proficiency Examinations : Students must pass the written and skill tests in the physical
education activity courses listed for proficiency testing at an equivalent of a C level achievement in the course. Only courses at the beginning level are offered for proficiency examination. Students must sign up for proficiency tests or credit by examination during the third week of each term at the department office in Gerlinger Annex. (4) Age : Students 30 years of age or older should show proof of age to the Head of the Service Course Program in the Department of Physical Education. (5) Transfer Status: Students transferring from institutions not requiring physical education should apply for waivers through the Admissions Office.
Fees: Payment of regular University registration fees entitles every student to the use of gymnasiums, pools, and showers, to the use of activity uniforms and towels, and to laundry service, whether or not they are registered for physical education courses. Students are urged to make full use of the gymnasium facilities for exercise and recreation.
Facilities: The University's buildings and playfields devoted to physical education instruction and recreation occupy a 42 -acre tract at the southeast corner of the campus. Esslinger Hall provides offices, classrooms, study areas, research laboratories, and gymnasium facilities. The building is planned for professional preparation in physical education, as well as for recreational needs of students. Leighton pool is next to Esslinger Hall.

Gerlinger Hall houses classrooms, instructional and recreational gymnasiums, court facilities, and a swimming pool.

Gerlinger Annex is a new facility with well-equipped gymnasium, dance studios, and office facilities.

Adjoining Esslinger Hall on the south is McArthur Court, basketball pavilion and athletic center of the Associated Students. McArthur Court seats more than 10,000 spectators. Playing fields located east and south of Esslinger Hall provide excellent facilities for outdoor class instruction and for intramural and intercollegiate sports. Hayward Stadium provides track and field facilities for intercollegiate athletics, class and recreational programs. Six standard concrete tennis courts are north of Hayward Stadium, eight additional courts south of Esslinger, and nine covered courts east of Leighton Pool. Autzen Stadium, a 41,000 -seat football stadium, was dedicated in the fall of 1967. It is located across the Willamette River from the main campus.

All facilities are available to both men and women, frequently in coeducational classes and activities.

## Recreation Programs

The Department of Physical Education sponsors comprehensive sports and recreational programs for the students, faculty, and staff of the University. One of the primary purposes of these programs is to provide an opportunity for all the members of the University community to involve themselves in some of the available sporting and recreational activities.
Intramural and Recreational Sports Activities: The existing programs provide a wide variety of sports participation opportunities in intramural sports, all-campus tournaments, interest groups, special events, and coeducational activities. In some cases, activities are provided separately for men and women.

Basketball, Bowling, Badminton, Cross Country, Flag Football, Golf, Handball, Innertube Water Basketball, Innertube Water Polo, Racquetball, Swimming, Softball, Soccer, Squash, Tennis, Trampoline, Track, Volleyball, Weight-Lifting, and Wrestling are some of the most popular activities.
Open Recreational Sports: The facilities and recreational equipment of the Department of Physical Education are available for open recreation when not scheduled for use. This includes the gymnasia, courts, and pools of Esslinger Hall, Gerlinger Hall, and Gerlinger Annex. Outside field space and tennis courts are also available on the same basis.

## Undergraduate Studies

The basic undergraduate curriculum in physical education, leading to the Bachelor of Science degree, provides a strong program of professional work. A strong high school background in biology, chemistry, physical education, English, and athletics is desirable. During the freshman and sophomore years, the student obtains a sound foundation in the sciences basic to professional studies and the liberal arts. This is supplemented by a broad emphasis on physical education activities and introductory instruction in physical education theory. The upper-division program is devoted principally to professional studies.

Admission: Students eligible for admission to the University of Oregon may be admitted to professional courses
in physical education on a premajor basis. Enrollment in these courses is dependent on meeting the prerequisites for each course.

Prospective physical educators will be admitted to the major program after successful completion of the following requirements: Completion of 90 credit hours of college or university work, including (a) 18 credit hours of science, or social science, or language and literature ; (b) 30 credit hours in professional physical educational courses which may include anatomy and physiology (PE 421 and PE 422) ; a 2.50 cumulative grade index in all college or university course work, with not more than 10 credit hours of grades F or N appearing on all college or university transcripts; completion of 12 credit hours of professional physical education activity laboratory courses; and, except for current enrollment, passing grades must be reported for all professional physical education courses and, when appropriate, for all teacher certification courses in which the student has enrolled.

Upon completion of the above, students may apply for admission to the major program and will be reviewed by the Department.
Program: The basic program is planned to satisfy the needs of the students planning either to teach physical education or to coach or to do both in the public schools. In addition, the program offers students a number of options for supplementary work to qualify them for additional responsibilities in the school or the community. These options are explained below. Students may also select an emphasis or a teaching norm in a field other than physical education, in which case they will complete an approved program in the second field including 21 credit hours of work beyond the introductory sequence in the field.

The basic program requires the following lower-division courses, totaling 41 credit hours: General Biology, 12 credit hours; Elementary Chemistry, 12 credit hours; First Aid (HE 260) 3 credit hours; Professional Activities, 12 credit hours.

The following upper-division courses, totaling 55 credit hours, are required: Human Anatomy ( $\mathrm{Bi} 391,392$ ) 6 credit hours ; Human Physiology ( Bi 321, 322) 6 credit hours; Educational Domains of Physical Education (PE 341) 3 credit hours; Class Techniques of Physical Education (PE 342) 3 credit hours; Organization and Administration of Physical Education (PE 343) 3 credit hours; Care and

Prevention of Injuries (PE 361) 3 credit hours; Scientific Foundations (PE 423) 4 credit hours; Physical Education for the Exceptional Student (PE 444) 3 credit hours; School Programs (PE 445) 3 credit hours; Tests and Measurements in Physical Education (PE 446) 3 credit hours; Kinesiology (PE 472) 3 credit hours; Physiology of Exercise (PE 473) 3 credit hours ; Professional Activities, 12 additional credit hours.

## Program of Study for Majors

Three different study programs leading to the major in Physical Education are provided by the department, namely : Program I, Scientific Specialization or Secondary School-Teaching Physical Education ; Program II, Secondary School-Teaching Physical Education; Program III, Elementary and Secondary School-Teaching Physical Education.
Qualified students may elect a major area of emphasis from these alternative programs.
Opportunities are provided to elect, with some of these programs, additional areas of emphasis from the supporting options available in the department or University.
Program I. Scientific Specialization or Secondary School-Teaching Physical Education: A choice between two program possibilities is available here. The first, a physical education major with a strong scientific emphasis and related course work preparatory to graduate study, research, or other area of scientific specialization without certification for teaching. This area provides an opportunity for superior students to prepare for courses in scientific and research aspects of physical education by arranging programs with greater concentration in biology, physiology, chemistry, and mathematics and substitute them for certain courses related to preparation for secondary or elementary school teaching. This option also provides opportunities for students to include programs of study for pre-physical therapy and athletic trainer options based on a strong scientific foundation.
The second area is a physical education major with a strong scientific emphasis leading to a degree in physical education and to certification for teaching on the secondary-school level.
A health-education teaching norm may be combined with this program or with Program II.

## Program II. Secondary School-

 Teaching Physical Education: Physical education majors selecting this areawill follow basically the same program as in Program I, with the exception that there is a choice of filling the 36 credit-hour science requirement for the Bachelor of Science degree by electing to take 36 credit hours of social science or 36 hours of science. Students electing this area may meet the anatomy and physiology requirement in the major by taking the courses Scientific Foundations (PE 421, 422). Prerequisites of three science foundations courses must be completed.

This program eads to a major in physical education with certification for teaching in the secondary schools. It may be used in combination with other options in the department or other teaching norms or areas of emphasis in the University.

Program III. Elementary and Secondary School-Teaching Physical Education: This area provides a program of studies which will prepare major students to teach physical education at any grade level from kindergarten through high school. Professional activity laboratory and professional courses of the basic program are included. Certain specialized courses related to elementary school physical education are added or substituted in the program. These include Games and Sports Skills for Elementary Children (PE 321), Posture and Developmental Activities for Children (PE 322), Rhythms and Dance (PE 323).

All students enrolled in major programs leading to certification take the courses in professional education required for certification. As a part of this requirement, physical education major students will complete field experience or practicum experiences in physical education as well as studentteaching in physical education. Students enrolled in Program III will do student-teaching at both the elementary and secondary school levels.

## Certification for Teaching Physical Education

The department offers opportunities for major and nonmajor students in physical education to meet the Teacher Standards and Practices Commission requirements for certification as physical education teachers.

The Teacher Standards and Practices Commission requires (1) satisfaction of certain minimum standards of subject preparation and professional education courses and (2) the recommendation of the institution at which the student completes the subject preparation.

Programs of study are available in the department to meet state standards and requirements for the recommendation of the University of Oregon endorsement for both the basic and standard (fifth year) certificates in physical education. Nonnuajor students interested in seeking either certificate are urged to interview appropriate advisers.
Fifth-Year Certification Requirements: Students transferring from other institutions who wish to enroll in a fifth-year program leading to a standard certificate in physical education must meet the University of Oregon requirements for the basic certificate in this field before final acceptance in the program. Students should plan to complete at least half of their fifth-year program in the Department of Physical Education at the University of Oregon.

## Options

Aquatic: This option prepares students for careers as aquatic specialists in schools, communities, public and private agencies, and institutions. Emphasis is on the development of competence in administration and conduct of instructional and recreational aquatic programs. Facility design, pool operation and maintenance procedures are included. Students must meet program prerequisites and obtain adviser's approval. Classes are offered in a structured sequence; requirements total $26-32$ credit hours.

The program includes (1) Foundation Courses : life guarding in aquatic programs, water safety instruction, community health, first aid, and summer internships. (2) Aquatic Specialty Courses: advanced aquatic activities, coaching aquatic sports, and practicums in coaching and student teaching. (3) Aquatic Administration: administration of aquatics programs, recreation leadership, administration of recreation, and supervised field experience.

Athletic Trainer: The Department of Physical Education offers undergraduate and graduate options in athletic training leading to National Athletic Trainers Association certification. The undergraduate option is a three-year program commencing in the fall of the sophomore year. The graduate offering is a two-year program which may be taken in conjunction with a master's degree. Both programs require a minimum of 600 clock hours in practical training. Application for admission to the program may be obtained from the Department of Physical Education.

Selections are based on academic performance, prior experiences, and written recommendations from prior associates.
Coaching: This option prepares students for careers involving coaching responsibilities in schools, communities, public and private agencies and institutions. Emphasis is on the development of competence in theory and techniques, organization and management of programs, prevention and care of injuries, and scientific bases related to body functioning in athletic activities.

Three programs with differing requirements are offered in this option. The first is for students preparing as physical education teachers and coaches in the schools. The second is for students preparing to teach in public schools and fields other than physical education. The third is for students who are not pursuing teaching certification and will work as paraprofessionals in other recreational athletic programs.

With the exception of the latter program, the basic core requirements include preparation in anatomy, physiology, kinesiology, physiology of exercise, care and prevention of injuries, psychology, athletic administration, athletic coaching, and appropriate professional activity laboratories and experience in coaching practicums.

The third program is a paraprofessional coaching option with much less emphasis on the scientific foundations relating to intense athletic competition.
Dance: The dance option combines professional work in physical education with special instruction in dance and related arts. There are excellent vocational opportunities in the fields of physical educational and recreation for persons whose professional preparation includes this competence.
Pre-Physical Therapy: Standard schools of physical therapy, which are usually operated in conjunction with medical schools, have admission requirements with strong emphasis on foundation work in the basic sciences. The sciences included in the basic curriculum in physical education, together with the understanding of body movement and exercise activities gained in professional physical education courses, provide excellent preparation for physical therapy training. Students interested in this work may arrange a special program, within the general framework of the physical education major, and may exclude courses especially designed to meet the requirement for a teacher's certificate.

## Graduate Studies

The Graduate School of the University of Oregon offers the Master of Science, Master of Arts, Doctor of Education, and Doctor of Philosophy degrees in Physical Education through the College of Health, Plyysical Education and Recreation.

## Programs of Study for Master's Degrees

Admission: A student seeking admission to the master's degree program should write to the Graduate Coordinator requesting an application. The Department of Physical Education requires a cumulative undergraduate grade point average of at least 2.75. A student who has a GPA of less than 2.75 may be admitted upon review of credentials and evidence of scoring at least 35 on the Miller Analogies Test or at least 470 on the verbal portion of the Graduate Record Examination.
Prerequisites: A master's candidate must have had at least the following undergraduate work or complete these prerequisites while studying for the master's degree: a minimum of 8 term hours in human anatomy and physiology, and one tern1 each in kinesiology, physiology of exercise, and motor developneent. In addition, students should have had at least one term of work in the following undergraduate course : principles and history of physical education. This course may carry graduate credit.
A candidate is expected to be reasonably skilled in a wide variety of physical educational activities and to know the specific methods for teaching them. These skills and methods may have been acquired formally through activity courses or informally through playing and teaching experience. Deficiences may be removed either by taking an appropriate course or by independent work followed by passing a proficiency examination.
Program of Study: The master's degree requires 45 credit hours of graduate work and may be taken with or without thesis. If the nonthesis program is pursued, three 9 -credit hour concentrations of courses must be completed within the offerings of the College and elected from the following areas (two of the areas must be in the Department of Physical Education) : (1) Administration, (2) Advanced Physiology of Exercise, (3) Anatomy, (4) Applied Research, (5) Biomechanics, (6) Physical Growth and Development, (7) History, Principles, and Philosophy, (8) Motor Learning, (9) Physical Education for Exceptional Students,
(10) Sociology of Sports, (11) Dance, (12) Health Education, (13) Recreation Management, (14) Safety and Driver Education.
All master's-degree candidates are required to take Statistical Methods (PE 540) and Critique and Interpretation of Research (PE 544), except those persons working on a master's degree with emphasis in teaching. This latter group may substitute advanced Tests and Measurements (PE 507) for the statistics course, and are permitted to work on a sequence of physical education teaching strategies courses within their total program.
A minimum of thirty credit hours must be earned on the Eugene campus with a maximum of fifteen credit hours of A, B or Pass-graded work accepted as transfer credit from other accredited colleges or universities.

All work for the master's degree must be completed within a period of seven years. This includes work for which credit is transferred from another institution, thesis, and the final examination.
Final Examination: Final examinations are required for both the thesis and nonthesis candidates. The final exam for the thesis candidate is oral and attended by at least three faculty members. The final exam for nonthesis candidates is written and includes the broad range of course work taken in the master's program.

## Programs of Study for Doctoral Degree

 Admission: To be admissible, a candidate must pass, with a qualifying score, either the Miller Analogies Test or the Graduate Record Examination. The qualifying score on the MAT is 50 , or 525 on the verbal portion of the GRE.Doctoral degrees are granted primarily for attainments and proven ability. The Graduate School requires at least three years of full-time study beyond the baccalaureate degree, of which at least one academic year (three consecutive terms) must be spent in continuous residence on the Eugene campus. Graduate credits from other approved institutions may be accepted if they are relevant to the program as a whole and are A or B grade.

Every candidate must complete a dissertation. A master's-degree thesis or a study in lieu of thesis must be completed prior to taking the comprehensive examination. A minimum of 40 credits of research courses, master's thesis, and dissertation is usually expected.

Several options are available to meet the language requirements for the

Ph.D. degree. A candidate may select a foreign language of his or her choice if justified on the basis of either professional relevance or personal benefit or both. Selection must be approved by the student's advisory committee. Twelve credit hours of computer-science courses or nine credit hours of advanced statistical design may be substituted for the language requirement.
Area of Specialization: Each doctoral candidate must have an area of specialization with a minimum of 30 credit hours, as well as a supporting area. The areas of specialization offered by the department include (1) Administration of Physical Education, (2) Anatomical and Kinesiological Bases of Physical Education, (3) Biomechanical Bases of Movement, (4) Elementary Physical Education, (5) Growth and Development Bases of Physical Education, (6) Motor Learning, (7) Physical Education and the Exceptional Student, (8) Physical Education and the Social Sciences, (9) Physiological Bases of Physical Education. As a supporting area, the doctoral candidate may select any of the above areas in addition to Health Education, Recreation and Park Management, or an area outside the College of Health, Physical Education and Recreation.
Qualifying and Final Examinations: Prior to or during the first three terms of study, a written doctoral qualifying examination is taken. A student is expected to exhibit knowledge and communication skills equivalent to a high quality master's degree graduate.

The written doctoral comprehensive examination is taken after completion of substantially all the doctoral course work, master's thesis, and language requirements. Passing of this examination advances the student to full doctoral degree candidacy. Included in this exanination are comprehensive essay questions on the areas of concentration, the supporting area, and research.

A final oral examination is taken after completion of the dissertation and of all degree requirements. It must be taken no later than three calendar years after advancement to candidacy.

## Service Courses

All Activity courses in the Physical Education Service Course Program are open to any student who meets the prerequisite skill requirement for the course.
CPE 101-199. Service Courses for Men and Women. 1 credit hour, each section. Adapted PE (corrective), Archery, Badminton, Basketball, Bicycle-Touring, Bowling,

Canoeing, Conditioning. Exercise and Posture,
Fencing, Flag Football, Golf, Gymnastics, Handball, Horseback-Riding, Jog-Run, Karate, Mountaineering, Mountain-Hiking, Personal Defense, Racquet Ball, Rock-Climbing, Rugby, Sailing, Scuba-Diving, Skiing, Soccer, Softball, Squash, Swimming, Table
Tennis, Temnis, Trampoline, Training for Sky-Diving, Track and Field, Tumbling and Trampoline, Volleyball, Weight Training, Wrestling, Yoga.
CPE 301-399. Service Courses for Men and Women. 1 credit hour, each section. Archery, Badminton, Basketball, Bowling, Fencing, Flag Football, Golf, Gymnastics, Handball, Horseback-Riding, HorsebackJumping, Skiing, Skin-Diving, Ski Touring, Softball, Springboard Diving, Swimming,
Tennis, Volleyball, Weight Training, Winter Mountaineering, Wrestling.
CPE Dance classes may also be taken to satisfy the physical education requirement.

## Professional Courses: Undergraduate

PE 131. Introduction to Health and Physical Education. 2 credit hours fall or spring. Professional orientation ; basic philosophy and objectives; professional opportunities and qualifications. Smith.
PE 194. Professional Activities. 2 credit hours each term, three terms. For professional students. Method, teaching techniques and basic skills. Fall: fundamentals of movement. Winter : gymnastics. Spring : track and field.
PE 199. Special Studies. Credit hours to be arranged. Approval of department head required.

## PE 200. SEARCH. 1-3 credit hours.

 PE 291. Lifesaving in Aquatic Programs. 2 credit hours. Basic skills of lifesaving in aquatic programs; leads to American Red Cross Certification in Advanced Lifesaving. Prerequisite: superior proficiency in swimming.PE 292. Swimming and Water-Safety
Instruction. 2 credit hours Analysis, methods of instruction, and evaluation at all age levels; leads to American Red Cross certification in water-safety instruction. Prerequisites: PE 291, Lifesaving in Aquatics Programs, or previous Water Safety Instructor Certification.
PE 294. Professional Activities. 2 credit
hours each term, three terms. For professional students. Method, teaching techniques and basic skills. Fall : elementary aquatics. Winter: volleyball and basketball. Spring: folk and square dance.
PE 321. Games and Sports Skills. 2 credit hours. Values, purposes, and uses of creative games, games of low organization, basic skills and lead-up activities for children in all types of game activities. General information, methods of instruction, time allotments for elementary school program.

## PE 322. Posture and Developmental

 Activities. 2 credit hours. Values, purposes and uses of mechanics of movement, posture screening, and developmental activities for children including :stunts and tumbling; gymnastics; track and field. General information, methods of instruction, time allotments for elementary school program.
## PE 323. Rhythms and Dance. 2 credit

 hours. Dance programs for children in the elementary school. Basic movement activities including locomotor and nonlocomotor movement, or iginal dance patterns, singing games, folk dances, native dance, and basic square dance. General information, methods of in-struction, time allotments for elementary school program.
PE 341. Educational Domains of Physical Education. 3 credit hours fall. Study, analysis, and inter pretation of the psychomotor, cognitive, and affective behavioral objectives of physical education through their historical and scientific source. Current application and significance in student learning and development. Youngen.
PE 342. Class Techniques in Physical Education. 3 credit hours winter. Psychological and physiological bases for the life-time development of motor skills. Analysis, practice, and evaluation of teaching strategies and modes appropriate to this goal.
PE 343. Organization and Administration of Physical Education. 3 credit hours spring. Planning and organizing the use of buildings, grounds, and recreational areas of the physical education program ; purchase and care of equipment ; budgeting equipment and operating costs. R. Smith and Rankin.
PE 344. Administration of Aquatic Programs. 3 credit hours. Organization and administration of aquatic programs. Open to majors, and to others with consent of instructor. D. Van Rossen.
PE 361. Care and Prevention of Injuries. 3 credit hours. Bandaging, massage, and other mechanical aids for the prevention of injuries. Analysis of types of injuries; emergency procedures. Prerequisite : Bi 391, 392, or PE 421, 422. Standifer
PE 394. Professional Activities. 2 credit hours each term. For professional students. Method, teaching techniques and basic skills. Fall: field sports or wrestling. Winter : tennis or badminton. Spring : conditioning, soccer or softball.
PE 400. SEARCH. 1-3 credit hours.
PE 403. Thesis. Credit hours to be arranged. PE 405. Reading and Conference. Credit hours to be arranged. Reading and assignments in connection with other courses for extra credit. Honors readings. Consent of instructor, and approval of the department head required.
PE 406. Special Problems. Credit hours to be arranged. Approval of department head is required.
PE 407. Seminar. Credit hours to be arranged. Approval of department head is required.
PE 409. Practicum. Credit hours to be arranged. Approval of department head is required.
PE 410. Experimental Course. Credit hours to be arranged.
PE 445. The School Program. 3 credit hours. Construction of physical education and intramural programs, on the basis of accepted principles, criteria, functions, and evaluation; emphasis on integration with the total school program. Prerequisite: PE 341, PE 342, PE 343. Youngen.
PE 465. Football Coaching. 3 credit hours winter. Systems of play, strategy, responsibilities of the coach, public relations. Prerequisite : junior standing. Brooks and staff.
PE 466. Basketball Coaching. 2 credit hours winter. Coaching methods. Fundamentals of team play; comparison of systems ; strategy; training, conditioning ; selection of players for positions. Prerequisite : junior standing. Haney and staff.
PE 467. Baseball Coaching. 2 credit hours spring. Review of fundamentals, with emphasis on methods of instruction; problems and duties of the baseball coach, including baseball strategy, baseball psychology, training,
conditioning. Prerequisite : junior standing. Krause.
PE 468. Track Coaching. 2 credit hours spring. Principles of training ; development of performance for each track event; selection of competitors for different events ; conducting meets. Prerequisite : laboratory experience in PE 194 and junior standing. Dellinger.
PE 472. Kinesiology. 3 credit hours. Basic mechanical principles as they relate to the study of anatomical structure and the analysis of motion. Prerequisite : Bi 391, 392 or PE 421, 422. Steinmetz.
PE 473. Physiology of Exercise. 3 credit hours. Physiological effects of muscular exercise, physical conditioning, and training; significance of these effects for health and for performance in activity programs. Prerequisite: $\mathrm{Bi} 321,322$. or PE 421, 422. Evonuk. PE 494. Professional Activities. 2 credit hours each term, three terms. For professional students. Method, teaching techniques and basic skills. Fall : golf. Winter : archery and court sports or dance. Spring: advanced gymnastics or dance.

## Upper-Division Courses Carrying Graduate Credit

PE 406. Special Problems. (g) Credit hours to be arranged. Approval of department head is required.
PE 406. Special Problems. (G) Credit hours to be arranged. Approval of department head is required.
PE 407. Seminar. (g) Credit hours to be arranged. Approval of department head is required.
PE 407. Seminar. (G) Credit hours to be arranged. Approval of department head is required.
PE 408. Workshop .(G) Credit hours to be arranged.
PE 421, 422, 423. Scientific Foundations of Physical Education. (g) 4 credit hours each term. Anatomical, physiological, growth and motor skill development, factors basic to allied health fields, physical education, recreation, dance, and athletic programs. Prerequisite: 9 credit hours of science or consent of instructor.

## PE 424. Administration of Elementary-

 School Physical Education. (G) 3 credit hours. Modern trends in elementary-school physical education; duties of the physical education specialist ; organization and administration at the primary, intermediate, and upper-grade levels; evaluative procedures and techniques; public relations: the role of elementary school physical education. Prerequisite: PE 321, PE 322, PE 323, or consent of instructor, Munson.PE 444. Physical Education for the Exceptional Student. (G) 3 credit hours. A study of common handicapping conditions, both structural and functional, found in school-age children, the limitations imposed by these conditions, and the responsibilities of the physical education teacher in working with such afflicted children in a physical education setting. Analyzes three major aspects of physical education for the handicapped child. These include body mechanics, exercise limitations, program adaptation. Prerequisites : $\mathrm{Bi} 391,392$; PE 421, 422 ; PE 472. Osternig.
PE 446. Tests and Measurements in Physical Education. (G) 3 credit hours. Use of tests and measurements in physical education; evaluation of objectives, programs,
and student achievement through measurement techniques. Reuter.

## Graduate Courses

PE 501. Research. Credit hours to be arranged. No-grade course.
PE 502. Supervised College Teaching. Credit hours to be arranged.
PE 503. Thesis. Credit hours to be arranged No-grade course.
PE 505. Reading and Conference. Credit hours to be arranged. Approval of the department head is required.
PE 506. Special Problems. Credit hours to be arranged. Study of selected problems in the field of physical education. Approval of the department head is required.
PE 507. Seminar. Credit hours to be arranged.
Administration of Service Program,
Advanced Anatomical Studies.
Advanced Physiology of Exercise.
Advänced Tests and Measurements.
Biomechanics in Physical Education.
Comparative Physical Education.
Computer Science as Applied to Physical Education.
Current Literature in Physical Education. Foundations of Physical Activity for Special Groups.
Physical Activities-Social Psychological Development of Children.
Scope of Physical Education as a Discipline. Sports Medicine.
PE 508. Workshop. Credit hours to be arranged.
PE 509. Practicum. Credit hours to be arranged.
PE 510. Experimental Course. Credit hours to be arranged.
PE 511. Philosophy of Physical Education. 3 credit hours. The philosophic foundations underlying the principles and practices of physical education as a part of the total educational program in the Western world. McCue.
PE 515, 516. History of Physical Education. 3 credit hours. each term. A history of physical education from its earliest development up to the 18 th century, followed by consideration of the various physical education systems in Europe and their transfer and adaptation to the United States. McCue.
PE 518. Current Movements of Physical Education. 3 credit hours. Identification and exploration of current perspectives and practices, literature and research pertaining to contemporary issues and trends in physical education and its allied areas.
PE 520. Physical Fitness Programs. 3 credit hours. Programs to meet individual physical fitness and social needs through physical education activities ; case-study techniques, developmental programs, development of social traits ; administrative problems. Prerequisite: PE 444, PE 446. Reuter
PE 521. Body Mechanics and Correctives. 3 credit hours. Common postural deviations causes, basic principles underlying prescription of exercise for those conditions, organization of corrective physical education program in schools and colleges. Examine in depth and evaluate normal and atypical body mechanics in static and dynamic postures; study the nature of prescriptive exercise. Develop and evaluate exercises for improvement or correction of atypical body mechanic deviations. Osternig.
PE 522. Orthopedics and Therapeutics. 3 credit hours. Handicapping conditions which are expressed orthopedically. Development
and understanding of the anatomical involvement and the influence of physical education activity on the specific handicap. Study of how the growth of bone and physical stress influence the nature of orthopedic conditions. Prerequisites: Bi 391 , 392. Osternig.
PE 523. Individual and Adapted Physical Education. 3 credit hours. Metabolic, neurologic, cardiac, respiratory, and emotional deviations, the planning of physical education and exercise programs for students and adults with such conditions. Identifies the physiological and psychological limitations imposed by various handicapping characteristics on the ability to perform fundamental and complex motor skills. Osternig.
PE 527. Techniques of Relaxation. 3 credit hours. The common causes of fatigue and neuromuscular hypertension; methods of combating them. Theories underlying technique of relaxation ; application of these techniques in daily living and in activities. Wooten.
PE 531, 532. Sports Medicine. 3 credit hours each term. The study of various medical factors which influence human performance in sport. Topics include medical supervision and legal implications; nutrition aids ; mechanics of injury, modalities of treatment and rehabilitation ; personality and environment factors and special problems for men, women, and children.
PE 533. Teaching Motor Skills. 3 credit hours. Identification and application of teaching modes; strategies to create a maximal atmosphere for acquisition of motor skills. Adler.
PE 534. Learning Motor Skills. 3 credit hours. Identification of variables which influence both the acquisition and retention of motor skill performance. Adler.
PE 535. Theories of Motor-Skill Learning. 3 credit hours. Relates modern learning theory to the performance and learning of motor skills. Practical application of cybernetic, information processing, open and closed loop and motor programming theory to those variables which the teacher and coach control. Research procedures in motor learning. Adler.
PE 537. Sports Psychology. 3 credit hours. Analysis of psychological factors and principles affecting physical performance, behavior, and emotions in sports ; differences between individuals and between teams.
PE 540. Statistical Methods in Physical Education. 3 credit hours. Elementary statistics applied to research, including central tendency, variability, normal probability curve, reliability and correlation. Prerequisite: graduate standing. Broekhoff.
PE 541. Statistical Methods in Physical Education. 3 credit hours. Advanced statistics applied to research, including variance analysis, co-variance analysis, partial and multiple correlation, regression equations, chi-square, special correlational techniques, and nonparametric processes. Prerequisite: PE 540. Broekhoff.
PE 544. Critique and Interpretation of Research. 3 credit hours. Examination of completed research in health, physical education, and recreation; applying research results to practical situations. Rhoda.
PE 545. Experimental Design in PhysicalEducation Research. 4 credit hours. Techniques and procedures of laboratory research in physical education; construction of tests; technical laboratory tests and their use ; design of experiments; application of advanced quantitative methods. Prerequisite : PE 446, PE 540, 541.

PE 550, 551, 552. Administration of Physical Education. 3 credit hours each term.
Administration of physical education in colleges and universities and city systems. Historical background, administrative theory ; organizational purposes, organizational climate, leadership behavior, human relations, processes of administration. McCue.
PE 554. Administration of Athletics. 3 credit hours. Historical development of athletics and their control. Place of athletics in education; purposes, administrative control, management, operational policies, care of equipment and facilities. Ritchey.
PE 555. Intramural Organization and Management. 3 credit hours. Nature and purposes of intramural programs; history of development. Departmental organization.
Relation of program to physical education instruction. Administrative problems. Borchardt.
PE 556. Administration of Buildings and Facilities. 3 credit hours. Building layout and equipment ; relation of various functional units-equipment service, dressing facilities, activity spaces, administrative units, permanent and dismantlable equipment. Rhoda.
PE 557. Supervision of Physical Education.
3 credit hours. Purpose of supervision;
supervision of staff, facilities, areas; departmental organization, regulations, policies. Sprague.
PE 558. Curriculum Construction in Physical Education. 3 credit hours. Basic elements and procedures of curriculum construction in physical education ; special application at the city, county, and state levels. For supervisors and administrators of physical education programs. Youngen.
PE 559. Professional Preparation in Physical Education. 3 credit hours. Historical development of professional preparation in the field of physical education ; curriculum, evaluation, and recruitment in the development and conduct of teacher-education programs in physical education. Sprague.
PE 561. Physical Growth and Development. 3 credit hours. Emphasis on the sensory-motor development of the preschool child in relation to physical, socio-psychological, and cognitive development. Application of research to the teaching of physical education to preschool children. Broekhoff.

## PE 562. Physical Growth and Develop-

 ment. 3 credit hours. Physical and socio-psychological development during the elementary school period in relation to motor performance. Stress on the practical applications for movement education of elementary school children. Broekhoff.
## PE 563. Physical Growth and Develop-

 ment. 3 credit hours. Physical and maturational changes during adolescence. Relationships with the personal-social development of the adolescent. Implications for guidance and classification for physical exercise and sports. Broekhoff.
## PE 567. Motor Development in Infancy

and Childhood. 3 credit hours. Study of the acquisition of motor skills during the first decade of life. Prerequisite : PE 446 or Psy 460 , or consent of instructor.
PE 571, 572, 573. Gross Anatomy. 3 credit
hours each term. Regional approach to human anatomy : extremities, trunk and abdomen, head and neck. Important to college teachers who give instruction in anatomy, kinesiology, and physiology of exercise. Application to body movement, sports medicine, and performance. Prerequisite : Bi 391, 392 , or equivalent. Wooten.

PE 574. Laboratory Techniques in Stress Physiology. 3 credit hours. Fundamental laboratory techniques in human physiology and their significance as measures of health and general physical fitness. Prerequisite: consent of instructor. Evonuk.
PE 575. Mechanical Analysis of Motor Skills. 3 credit hours. Basic mechanics of movement ; the application of mechanical principles to the study and analysis of selected fundamental movement patterns and physical education activities. Prerequisite: $\mathrm{Bi} 391,392$, PE 472 or equivalent. Bates.
PE 576, 577, 578. Advanced Physiology of Exercise. 3 credit hours each term. The physical and chemical mechanisms underlying the major functions of the body. Consent of instructor is required. Evonuk.

# Recreation and Park Management 

## Faculty

Larry L. Neal, D.Ed., Department
Head, Associate Professor of
Recreation and Park Management (administration, supervision). B.S., 1961, M.S., 1962, D.Ed., 1969, Oregon. William G. Boldt, M.S., Visiting Assistant Professor of Recreation and Park Management (program specialties, leadership, field supervision). B.S., 1971, M.S., 1975, Oregon.
Effe L. Fairchild, D.Ed., Associate Professor of Recreation and Park Management (leadership, recreation programs, community education). B.S., Florida Southern College, 1955 ; M.S., Springfield, 1958 ; D.Ed., Oregon, 1974.
Patrick P. Fenzerick, M.S., Assistant Professor of Recreation and Park Management (activity leadership, areas and facilities ). B.S., 1961, M.S., 1971, California State University at Sacramento.
Phyllis M. Ford, Re.D., Professor of Recreation and Park Management and Graduate Coordinator (outdoor recreation, outdoor education). B.S.,
Massachusetts, 1949 ; M.A., Arizona State University, Tempe, 1955 ; Re.D., 1962, Indiana.
Dennis R. Howard, Ph.D., Assistant Professor of Recreation and Park Management (management, research methods). B.S., 1966, Oregoń ; M.S., 1967, Illinois ; Ph.D., 1974, Oregon State University.
Gale B. Orford, Ph.D., Assistant Professor of Recreation and Park Management (professional foundations, practicum, youth agencies). B.S., 1972, M.S., 1973, Ph.D., 1978, Oregon.
Lynn S. Rodney, Ph.D., Professor of Recreation and Park Management (administration). B.A., 1936, M.A., 1938, Washington State ; Ph.D., Michigan, 1955.
S. Harold Smith, Ph.D., Visiting Assistant Professor of Recreation and Park Management (therapeutic recreation). B.S., 1967, Brigham Young University; M.S., 1968, Washington ; Ph.D., 1974, Utah.

## Special Staff

Thomas H. Gressler, Ph.D., Visiting Assistant Professor of Recreation and Park Management (cultural arts). B.S., 1960, M.A., 1963, Ph.D., Ohio, 1973.

Douglas R. Nichols, M.S., Visiting Instructor of Recreation and Park

Management, (environmental education). B.A., Michigan, 1969 ; M.A., Michigan, 1971.
James Gary Walker, M.S., Visiting Lecturer in Recreation and Park Management (budget and finance). B.S., 1961, M.S., 1966, Oregon.

## Faculty Emeriti

Lois E. Person, M.S., Assistant Professor Emerita of Recreation and Park Management (applied arts). B.S., North Dakota, 1948 ; M.S., Cornell, 1950; at Oregon since 1959.

The Department of Recreation and Park Management has as its major function the preparation of students for broad and inclusive professional careers in leadership, supervision, administration, and planning of recreation, park, and leisure service.
Institute of Recreation Research and Service: The Institute of Recreation Research and Service, maintained by the College of Health, Physical Education, and Recreation in conjunction with its instructional progran in recreation and park management, assists communities in the development of recreation, park, and youth-service resources, conducts research in various aspects of recreation development, and provides information on research findings and nation-wide community experience as a basis for the solution of recreation problems. Through the Center of Leisure Studies, the institute sponsors conferences and workshops, and welcomes requests for information and assistance from public and private recreation agencies.
Project Extend-Ed: Project ExtendEd is an interdisciplinary master's degree program, the purpose of which is to prepare professionals to work with the disabled in programs related to recreation, physical education, and special education. The program is sponsored and administered by the Department of Recreation and Park Management and offered in conjunction with the Department of Physical Education and the College of Education.

## Undergraduate Studies

The Department of Recreation and Park Management offers major curricula leading to the Bachelor of Science or Bachelor of Arts degrees and provides a foundation for graduate work leading to the Master of Science, Master of Arts, and doctoral degrees. The department places a strong emphasis on courses that provide a
liberal education and courses that have a professional focus.

Graduates in recreation and park management become recreation directors in community centers, playgrounds, the armed forces, industries, hospitals, churches, and institutions ; directors, supervisors and administrators in youth-serving agencies; superintendents and managers of park departments and districts; administrators of recreation in cities, counties, and state agencies ; directors of camping and outdoor recreation prograns and centers; urban park and recreation planners; managers of private and connmercial recreation enterprises; and leisure educators; and faculty on college and university staffs.
Admission: Students designating recreation as their intended major are classified as Recreation and Park Management (RPM) majors. In this status, they are advised by the head undergraduate adviser and complete department prerequisites before becoming eligible for admission into the upper-division program. All RPM courses except RPM 150, 199, 407 seminar in Introduction to Field Study (upper-division) 408 and 415 must be taken for a grade.

The requirements for entering the Block Progran are as follows:
(1) Junior standing ( 90 hours) including the following: (a) One course Psychology, (b) English Composition (Wr 121 or Wr 122 and Wr 123 or equivalent), (c) Health Education requirement, (d) One course Physical Education, (e) Nine hours Social Science including one Sociology course, (f) Nine hours Science, (g) Nine hours Arts and Letters including one Speech course, (h) RPM 407 Group Process or other acceptable course ; i.e., the following : PS 412(G), Soc 430(G), RhCm 123, RhCm 323, RhCm 432(G), Mgt 321, Mgt 322, Mgt 416, CSPA 430 ; (i) RPM 251 and RPM 252 (required courses), (j) at least 3 hours fron RPM 150, 199, 290, etc.
(2) 2.5 GPA in graded classes.

Block Program: Students completing the prerequisites for the upper-division program are admitted to the term of required upper-division major courses, called the Block Program. The Block Program is a full term of RPM indoctrination integrating theory and practice through lecture, group interaction, and experiential assignments in the following courses : RPM 410 Leisure for Special Groups, RPM 370 Organization and Administration, RPM 396 Recreation Programs, RPM 446 Evaluation of Leisure Services,

RPM 496 Areas and Facilities, RPM 409 Practicum.
Areas of Emphasis: Undergraduate students majoring in Recreation and Park Management select an area which provides in-depth professional development. They may select from four general areas: Leisure Service Management, Leisure for Special Populations, Outdoor Recreation/Education, and Community Youth Services.

Each student is required to take three courses in the area of emphasis, plus RPM 407 Seminar: Introduction to Field Study (three hours credit) and RPM 415 Supervised Field Study ( 12 credit hours). In addition to the Block Program and its prerequisites and the courses in the area of emphasis, elective courses are offered to complement the program. A ninimum of 45 term hours credit in RPM prefix courses is required for graduation.
Leisure Service Management: This emphasis is designed to provide preparation for careers in the management of public and private recreation and leisure service organizations.

Students electing this area of emphasis may select courses leading to careers in urban parks, management, or program specialties.

In addition to the professional core, three of the following plus RPM 407 Introduction to Field Study and RPM 415 Supervised Field Study are required: RPM 371 Human Relations in Supervision of Personnel, RPM 444 Basic Issues, RPM 445 Budget and Finance, RPM 492G Recreation and Natural Resources, RPM 497G Operation and Design of Recreation Parks, RPM 410 Land Acquisition and Management, RPM 499G School-Community Recreation Programs.

Recommended electives include courses in: Business Administration, Journalism, Political Science, Sociology, Community Service and Public Affairs, Landscape Architecture and Urban Planning, Aquatics, Music, Art, Drama, Physical Education, Dance.
Leisure for Special Populations: This area of emphasis provides both conceptual and practical training for those interested in working with special groups (i.e., ill, handicapped, disabled, institutionalized, aged) in community, institutional, or private settings. In addition to the professional core, the following must be taken: RPM 461G Survey of Therapeutic Recreation Services, RPM 462G Programs for Special Groups, RPM 463G Community Organization for Special Groups, RPM 407 Seminar: Intro-
duction to Field Study, RPM 415 Supervised Field Study.
Recommended electives include courses from: Special Education, Educational Psychology, Psychology, Gerontology.
Outdoor Recreation/Education: This area of emphasis is designed to prepare students for careers related to environmental interpretation, outdoor education, and outdoor programming. Typical career positions are interpretive naturalists, outdoor education coordinators, elementary school teachers, outdloor recreation supervisors.
All students in this area should plan to earn a B.S. degree with 36 hours in science. Students in the outdoor education emphasis are recommended to complete requirements for elementary certification in the College of Education. For students combining this area with a certificate in Elementary Education, the supervised field study requirement is lowered to three hours.
In addition to the professional core, the following must be taken: RPM 490 Principles of Outdoor Education, RPM 492 Recreation and Natural Resources, choice of RPM 391 Camp Administration; RPM 392 Camp Program Administration, RPM 493(G) Environmental Interpretation, RPM 407 Introduction to Field Study, RPM 415 Supervised Field Study.
Recommended electives include courses from: Biology, Geology, Geography, Landscape Architecture, Education.
Community Youth Services: This emphasis provides preparation for students wanting to work with youth at the direct leadership level and at the administrative levels. Emphasis is placed on work with normal youth, focusing on group work, camping, and volunteer administration. Through the careful selection of electives, a focus can be gained relative to the program and organization for youth with special needs. Possible career positions are: community youth specialists, youth agency staff, institutional youth program coordination.
In addition to the professional core, the following must be taken: RPM 394 Youth Agencies I, RPM 395 Youth Agencies II, RPM 445 Budget and Finance, RPM 407 Introduction to Supervised Field Study, RPM 415 Supervised Field Study.

## Recommended electives include

 courses from: Sociology, Community Service and Public Affairs, Special Education, Educational Psychology, Psychology.Graduation Requirements: Graduation requirements for a baccalaureate degree in Recreation and Park Management are established by the University and the departments and include the following : 45 term hours in approved RPM prefix courses, two terms of English composition, five terms of physical education activity, Health Education 150 or 250 , three courses of social science including one sociology course, three courses in arts and letters including one speech course, three courses in science, one psychology course, and one group processes course (RPM 150, 199 or more than 3 hours of RPM 409 and not included in the 45 hours required for graduation).
For the B.S. degree, students take either 36 hours of Science or 36 hours of Social Science. For the B.A. degree, students take 36 hours Arts and Letters and must pass the third term of a second-year foreign language.

## Graduate Studies

The Graduate School of the University of Oregon offers the Master of Science, Master of Arts, Doctor of Education, and Doctor of Philosophy degrees in Recreation and Park Management through the College of Health, Physical Education, and Recreation. Information on University regulations governing graduate admission is in the Graduate School section of this catalog.

The master's programs are designed to prepare graduates for administrative, supervisory, consultation, and teaching positions in public, private, and other types of recreation and park agencies. Students have the options of : thesis, master's project, or a comprehensive examination.

The doctoral programs endeavor to give concentrated study for top-level executive positions, research, and teaching at the advanced undergraduate and graduate levels.
Admission: A student seeking admission to the graduate program should write to the department Graduate Coordinator requesting application materials.
A committee of graduate faculty members of the Department of Recreation and Park Management reviews all applications for graduate study. Graduation from an accredited college or university and a total cumulative undergraduate grade point average of 2.75 or higher is required. Master's degree applicants must score satisfactorily on the Miller's Analogies Test (35) or the verbal portion of the Graduate Record Examination (470).

Each student is asked to take either of these tests as part of the application procedures. Three letters of recommendation from people who know of the applicant's academic or professional work experience are also required.

A doctoral applicant should have a master's degree with a grade point average of 3.5 and at least two year's professional full-time work experience in either recreation or park management or both. The minimum acceptable scores for doctoral candidates are 50 on the MAT or 520 on the verbal portion of the GRE.
Master's Programs: The College of Health, Physical Education, and Recreation offers programs leading to the Master of Science and Master of Arts in Recreation and Park Management.
Degree Requirements: Master's degree candidates who have not completed an undergraduate degree in Recreation and Park Management are required to complete the following prior to or during their graduate study. Professional Foundation of Recreation (RPM 251 ) ; Recreation Activity Leadership (RPM 252) ; and three undergraduate courses approved by their advisers.

A minimum of 45 credit hours of graduate credit must be completed for the master's degree. Thirty credit hours must be earned on the Eugene campus. A maximum of 15 credit hours may be transferred from other colleges and universities upon approval by the Graduate School.

At least 24 of the 45 credit hours for the degree must be selected from courses offered by the Department of Recreation and Park Management. At least 9 credit hours must be from courses offered by other departments. The courses selected must make up concentrations that strengthen the student's major areas of interest.
Graduate Core Courses: All individuals engaged professionally in the field of recreation and parks have a common concern-recreation as it affects individuals, land resources, and society. It is deemed appropriate, therefore, that all students pursuing a graduatedegree program have a common core of courses. The following core of 9 credit hours is required for all graduate degree candidates: Philosophical Foundations of Leisure (RPM 511) ; Measurement in Leisure Services (RPM 540) ; Research Methods (RPM 544). (Note: Graduate credit courses in social science or education statistics and research methods may be elected in option depending upon the student's selected area of specialization
and research. Consent of the faculty adviser is required.)
Final Examinations: The final examination for students selecting the thesis option is oral in nature and is administered by the student's thesis committee. The final examination for those selecting the project option is the presentation of the project results to, and acceptance by, the professional field of recreation. For students selecting the comprehensive examination option, the examination consists of two fourhour sessions during which the student completes comprehensive essays in areas of concentration.

All work for the master's degree must be completed within a period of seven years. This includes work for which credit is transferred from another institution, the thesis, the project, or the final examination.

Doctoral Programs of Study: The College of Health, Physical Education and Recreation offers programs leading to the Doctor of Philosophy and Doctor of Education in Recreation and Park Management.

## Degree Requirements: Doctoral

 degrees are granted primarily for attainment and proven ability. The specific number of credits and courses are determined by the candidate's doctoral committee and are flexible to meet the particular needs and interests of the candidate. The Graduate School requires at least three years of full-time study beyond the baccalaureate degree, of which at least one academic year (three consecutive terms) must be spent in continuous residence on the Eugene campus. One should not plan to transfer more than 65 to 70 credit hours (including the 45 credits for the master's degree), because of the nature of the degree requirements.The doctoral student should attain a greater depth of knowledge in the selected area of specialization than does the master's degree student. A minimum of 30 credit hours in courses offered by the Department of Recreation and Park Management is required.

A broad understanding of research methodology and application of techniques for evaluation of recreation and park services is considered essential in the doctoral program. Four or five courses in statistics and research methods are usually required.

Every candidate for the doctoral degree must complete a dissertation. A master's degree thesis or a study in lieu of thesis must be completed before the undertaking of a doctoral dissertation. A minimum of 27 credit hours of
research for the thesis and dissertation is usually expected.

A minimum of 21 credit hours (for the Ph.D. degree) or 30 credit hours (for the D.Ed. degree) is required for a supporting area in a related discipline such as sociology, political science, landscape architecture, regional planning, and education.

Several options are available to meet the language requirement for the Ph.D. degree. Twelve hours of com-puter-science courses or nine credit hours of advanced statistical design may be substituted for the language requirement.
Qualifying and Final Examination: Prior to or during the first two terms of study, a doctoral qualifying examination is written. A student is expected to exhibit knowledge and communication skills equivalent to a high quality master's degree graduate. Any weaknesses are generally strengthened through course work during the program of studies.

The written doctoral comprehensive examination is taken after completion of substantially all the doctoral course work, master's thesis, and language requirements. Passing of this examination advances the student to full doctoral-degree candidacy. Included in this examination are comprehensive essay questions on the Recreation and Park Management area of concentration, the supporting area, research, and professional foundations.

A final oral examination is taken after completion of the dissertation and all degree requirements.
Interdepartmental Program of Study: It is possible to develop a program of study within any two or three departments in the College of Health, Physical Education, and Recreation. Additional hours are required.
Areas of Specialization: Five areas of specialization are available, allowing considerable flexibility to design program requirements specific to the professional interests and needs of the individual graduate student:
(1) Recreation and Park Administration focuses upon competence needed for executive positions in recreation and park systems.
(2) Recreation Program Super-vision-Administration emphasizes the development and administration of programs in various settings such as in local government, voluntary agencies, industrial recreation, hospitals, and the armed forces.
(3) Professional Education establishes a foundation for the teaching of
recreation and park courses in institutions of higher learming.
(4) Outdoor Recreation and Education is directed toward the development and administration of school outdoor-education programs, resident and day-camp programs, and naturalist interpretive programs.
(5) Recreation for Special Groups is designed toward the development and administration of programs for the ill, handicapped, and special groups.

Graduate Assistants and Trainees. A few teaching and administrative assistantships are available primarily to full-time students who have completed several years of teaching or other full-time professional field experience. Stipends include a salary for nine months plus a reduction in tuition each term. Applications may be obtained from the Graduate Coordinator, Department of Recreation and Park Management.

Traineeships are available either through the Center for Gerontology or Project Extend-Ed. Stipends vary depending upon the student's program of studies, but each includes payment of tuition. Application forms and related information may be obtained by writing to the Department of Recreation and Park Management.

A list of local employment opportunities is available by request from the Department of Recreation and Park Management office.

## Undergraduate Courses

RPM 150. Recreation in Society, 3 credit
hours. Concept of community recreation;
scope of recreation in American life; the role of recreation, parks, and sports in human experience and in the structure of community living. Offered each term to nonmajors or premajors. May be taken for a grade, or for the Pass/No Pass option.
RPM 199. Special Studies. Credit hours to be arranged.
RPM 200. SEARCH. 1-3 credit hours.
RPM 251. Professional Foundations of
Recreation. 3 credit hours. Introduction to the basic historical and philosophical foundations of leisure and recreation. Offered each term. Howard.
RPM 252. Recreation Activity Leadership. 3 credit hours. Methods and techniques of group and individual leadership in recreation activities. Leadership experience in various recreational settings. Offered each term. Boldt, Fenwick.

## RPM 290. Camp Counseling. 3 credit hours.

 Orientation to youth in camps; examination of the values and objectives of organized camps; understanding campers, camp programs, and staff responsibilities. Offered winter term for nonmajors, premajors and majors.
## RPM 353. Group Processes in Recreation. 3 credit hours.

RPM 370. Organization and Administration of Recreation. 3 credit hours. Administration of public recreation and park services provided by municipal, district, county, state, and federal departments; legal provisions; organization; finance; public relations. Rodney, Neal, Howard.
RPM 371. Human Relations in Supervision of Personnel. 3 credit hours. Supervision of personnel in public recreation and park services provided by municipal, district, county, state, and federal recreation and park departments. Prerequisite: RPM 370. Neal.
RPM 391. Camp Administration. 3 credit hours. Selected organizational and administrative aspects of organized camping including : site development, personnel, health, safety, sanitation, programs, finance, and public relations; emphasis on national standards and local regulations. Ford.
RPM 392. Camp Program Administration. 3 credit hours. Standards and principles of administration. Offered spring term.
RPM 394. Youth Agencies I. 3 credit hours. Critical analysis of national youth-serving organizations as they related to the characteristics and normal needs of the youth they serve. Prerequisite: Junior standing in RPM. Offered twice each year.

## RPM 395. Youth Agencies II. 3 credit

 hours. In-depth investigation of administrative and leadership considerations of youthservice organizations. Includes direct contact with leaders of and participation in local youth service organizations. Prerequisite : RPM 394RPM 396. Recreation Programs. 3 credit hours. Development, analysis, and evaluation of content, public relations, funding, facilities, and leadership of leisure programs for municipal, voluntary, private, church, and commercial agencies. Offered each term. Fairchild.
RPM 400. SEARCH. 1-3 credit hours.
RPM 405. Reading and Conference. Credit hours to be arranged. Approval of department head is required.
RPM 406. Special Problems. Çredit hours to be arranged. Approval of department head is required.
RPM 407. Seminar. Special 3-credit hour seminars are developed by arrangement.
RPM 409. Practicum. 1-15 credit hours.
The following four practicum topics are scheduled with credits as noted. Others may be arranged.
Special Groups. 1-15 credit hours.
Recreation Programs. 1-15 credit hours.
Youth Agencies. 1-15 credit hours.
Outdoor Education. 1-15 credit hours.
RPM 410. Leisure for Special Groups. 3
credit hours. Social trends affecting TR; basic knowledge of the TR process in particular settings; the development of assertiveness. Smith.
RPM 415. Supervised Field Study. 3-15
credit hours. Prerequisite: Completion of core requirements, practicum, three courses in area of concentration, and permission of instructor. Boldt.
RPM 444. Basic Issues. 3 credit hours. Identification, exploration, and assessment of basic issues and challenges facing professionals in the parks, recreation, and leisureservice field. Fenwick.
RPM 445. Budget and Finance. 3 credit hours. Basic and innovative types and sources of funds for the operation and capital financing of park, recreation, and leisure services. Budget and accounting procedures, municipal recreation services presented in an applied and functional approach. Walker.

RPM 446. Evaluation of Leisure Services. 3 credit hours. Methods, techniques, and application of evaluation in a wide variety of functions normally found in recreation and park services including : clientele, programs, per sonnel, facilities, and organization. Neal.
RPM 496. Recreation Areas and Facilities. 3 credit hours. Basic considerations in the planning, construction, and operation of recreation areas, facilities, and buildings. Fenwick.

## Upper-Division Courses Carrying Graduate Credit

RPM 407. Seminar. (G) 3 credit hours. RPM 408. Workshop. (G) Credit hours to be arranged.
RPM 410. Experimental Course. (G) Credit hours to be arranged.
RPM 461. Survey of Therapeutic Recreation Services. (G) 3 credit hours. Examination of fundamental practice of service. Preparation in aspects of service delivery to individuals, including initial case assessment, evaluation, and treatment/program determination. Second in series within Therapeutic Recreation Specialization. Prerequisite: Completion of Block Program. Smith.
RPM 462. Programs for Special Groups.
(G) 3 credit hours. Leadership training in the use of recreation activities with persons with special conditions. Techniques in programming and adaptation to meet the leisure needs of special groups in today's society, including comprehensive program development and evaluation, individual assessment and management, analysis and use of activities/experiences, and problem solving in client programming. Prerequisite : completion of Block Program.
RPM 463. Community Organization for Special Groups. (G) 3 credit hours. Common practices and patterns of special group-serving agencies including recreation, education, and health agencies; current issues in community organization to meet basic needs and insure basic human rights; societal attitudes and conventions as they relate to and affect services for special groups. Smith.
RPM 467. Social Dimensions of Leisure and Retirement. (G) 3 credit hours. The concepts of leisure and retirement are developed and examined as potential social replacements for work and productivity in modern society. Philosophies of education for leisure and retirement are presented and critiqued.
RPM 468. Organization of Senior Leisure Services. (G) 3 credit hours. The scope of leisure service delivery for aging populations is examined from a theoretical and practical organizational process. Generalized focus is on leisure services in senior centers, nursing homes, retirement communities, and volunteer programs.
RPM 490. Principles of Outdoor Education. (G) 3 credit hours. Development of outdoor education and school camping; theories, practices, educational significance; organization, administration, and methodology. Ford.
RPM 492. Recreation and Natural Resources. (G) 3 credit hours. Administration of natural resources at the national, state, local, and private levels, with emphasis on the understanding of how outdoor recreation affects and is affected by the resources and the management philosophy and policies of the agencies. Ford.

RPM 493. Environmental Interpretation. (G) 3 credit hours. Methods and materials in interpreting natural resources to the general public. Designed for students in park planning, outdoor recreation, and resource management. Ford.

## RPM 497. Operation and Design of

 Recreation and Parks. (G) 3 credit hours. Planning, execution, and supervision of park operations and maintenance including turf management, tree programs. landscaping, construction procedures, maintenance scheduling, and personnel practices.RPM 410. Park Planning Systems. (G) 3 credit hours. The application of park land acquisition, development, and management methods and practices within a heuristic simulation game context. Fenwick.
RPM 499. School and Community Recreation Programs. (G) 3 credit hours.
Principles of program planning for school and community types of programs considered in relation to sex and age and individual interests, needs, and capacities. Community educative processes and the role of community schools explored. Fairchild.

Graduate Courses
RPM 501. Research. Credit hours to be arranged.
RPM 502. Supervised College Teaching.
Credit hours to be arranged.

RPM 503. Thesis. Credit hours to be arranged.
RPM 505. Reading and Conference. Credit hours to be arranged. Approval of department head is required.
RPM 506. Special Problems. Credit hours to be arranged. Study of selected problens in recreation. Approval of department head is required.
RPM 506. Master's Project. 3-6 credit hours. Reserved for M.S. candidates with approval to pursue project option. (Three credits beyond the 45 required for degree.)
RPM 508. Workshop. Credit hours to be arranged.

## RPM 509. Practicum. 3-12 credit hours.

RPM 510. Studies and Surveys. 3 credit
hours. Methods, techniques, and application of evaluation in a variety of functions normally found in leisure services; includes participants, programs, personnel, facilities, and organization. Also includes an applied research problem. Neal.

## RPM 511. Philosophical Foundations of

 Leisure. 3 credit hours. An examination of historical theories of play and leisure, an analysis of fundamental philosophical concepts as they relate to principles and practices of the conduct of programs for leisure, and a critical overview of current literature on the challenges of leisure. Ford.
## RPM 540. Measurement in Leisure

Services. 3 credit hours. Theory and application of data analysis and measurement to leisure service adninistration, research, and planning models; the use and limitations of descriptive and inductive measurement techniques to recreation related variables. Application of graphic and table presentations ; practice in calculator and computer data processing.
RPM 544. Research Methods. 3 credit hours. Application of social research methods to school and community setting; procedures in study design, methods of data collection, interpretation and presentation.
RPM 552. Problems of Recreation Supervision. 3 credit hours. The purpose of supervision; principles and techniques of supervision in a modern program of recreation; staff relationships ; departmental organization; policies, regulations, problems. Neal.
RPM 553. Administration of Recreation. 3 credit hours. Organization and administration of park and recreation programs in districts, communities, and municipalities ; legal aspects, source of funds, types of programs. Rodney.
RPM 554. Problems of Camp Managements. 3 credit hours. Analysis of problems under various types of camp sponsorship; principles, techniques, resources, administrative practices; principles and problems of leadership and group behavior. Ford.


## School

## of

## Journalism

## Faculty

Galen R. Rarick, Ph.D., Dean, Professor of Journalism (communication research, news-editorial). B.A., Denver, 1948 ; M.A., 1951, Ph.D., 1963, Stanford.
William E. Cook, M.A., Assistant Professor of Journalism (advertising, public relations). B.S., 1965, M.A., 1968, Florida.
John W. Crazeford, M.A., Professor of Journalism (advertising). B.A., Northwestern, 1935 ; M.A., Michigan State, 1958.
Charles T. Duncan, M.A., Professor of Journalism (news-editorial). A.B., 1936, M.A., 1946, Minnesota.
Jack D. Ewan, M.S.J., Associate Professor of Journalism (advertising and public relations). B.S.J., 1948, M.S.J., 1964, Northwestern. (On leave 197879.)

Roy K. Halverson, Ph.D., Associate Professor of Journalism (newseditorial). B.S., 1957, M.S., 1963, Wisconsin ; Ph.D., Illinois, 1970.
Jack R. Hart, Ph.D., Assistant Professor of Journalism (news-editorial). B.A., Washington, 1968 ; Ph.D., Wisconsin, 1975.
Mary S. Hartman, B.A., Assistant Professor of Journalism (news-editorial). B.A., Washington State, 1960.

James B. Lenuert, Ph.D., Professor of Journalism (communication research). A.B., 1957, M.J., 1959, California, Berkeley; Ph.D., Michigan State, 1964. Duncan L. G. McDonald, M.S., Visiting Assistant Professor of Journalism (news-editorial). B.S., Ohio, 1966; M.S., Oregon, 1972.

Kenneth T. Metzler, M.S.J., Associate Professor of Journalism (news-
editorial). B.S., Oregon, 1956; M.S.J., Northwestern, 1967.
Roy Paul Nelson, M.S., Professor of Journalism (news-editorial, advertising). B.S., 1947, M.S., 1955, Oregon. Karl J. Nestvold, Ph.D., Associate Professor of Journalism (broadcasting). B.S., Wyoming, 1954 ; M.S., Oregon, 1960 ; Ph.D., Texas, 1972. Willis L. Winter, Jr., Ph.D., Professor of Journalism (advertising). B.S., California, Berkeley, 1950 ; M.S., Oregon, 1957 ; Ph.D., Illinois, 1968.

## Faculty Emeriti

John L. Hulteng, M.S., Professor Emeritus of Journalism (newseditorial). Ph.B., North Dakota, 1943 ; M.S., Columbia, 1947 ; at Oregon since 1955.
R. Max Wales, M.A., Professor Emeritus of Journalism (advertising, public relations). B.A., Washburn, 1933 ; M.A., Iowa, 1956; at Oregon since 1957.
Carl C. Webb, M.A., Associate Professor Emeritus of Journalism (newseditorial). B.S., 1932, M.A., 1950, Oregon; at Oregon since 1943.

A Department of Journalism was organized at the University of Oregon in 1912, and became one of the University's professional schools in 1916. The sequences in advertising, newseditorial, public relations, and radiotelevision journalism are accredited by the American Council on Education for Journalism.

Students who major in journalism are preparing for careers in a variety of fields: newspaper reporting and editing, magazine writing and editing, advertising, public relations, photojournalism, radio-television news and management, and the teaching of journalism.

In addition, they have a common concern with the basic problems and techniques of communicating information and ideas to large and varied audiences. They study the role of the mass medlia in society; the history of journalism ; the structure of law affecting the press, broadcasting, and advertising ; and ethics and responsibilities of writers, editors, and other communicators.

Because their work will touch every aspect of life, journalism majors need as broad a liberal education as possible. At Oregon, journalism students spend about one-fourth of their time in courses in the School of Journalism (a maximum of 46 of the 186 credit hours required for a baccalaureate degree). Most of the remainder of their course work is chosen from the liberal arts departments, particularly literature, history, economics, political science, psychology, and sociology.

This pattern is the standard for all
programs accredited by the American Council on Education for Journalism. Oregon is one of fewer than seventy schools with accredited programs. It is the only school on the West Coast and one of only twelve in the United States with as many as four accredited sequences. The School of Journalism is one of the oldest in the country.

Faculty members are former professionals who combine academic background with practical experience in their special fields. They include advertising-agency people, newspaper editors, public-relations executives, magazine writers, researchers, photographers, graphic artists, and broadcasters. In Eric Allen Hall, named for the first dean of the school, faculty and students have a modern instructional center in which to work and study.

Many journalism majors obtain practical experience on their own while in school. Some work on the student newspaper, the Oregon Daily Emerald. Others are announcers, writers, or directors at the student radio station, KWAX, or at the campus television facilities. Others work on the student yearbook Oregana. Internships for summer employment are often available at newspapers, broadcasting stations, advertising agencies, and public relations departments. The School works with the University's Placement Bureau in helping students find part-time employment while they are in school and full-time employment upon graduation.

The best pre-college preparation for journalism majors is a broad collegepreparatory program in high school, with emphasis on English, literature, speech, history, and the social sciences. Foreign languages are not required but are strongly recommended. Students at junior and community colleges who plan to transfer to the University to study journalism are advised to take liberal-arts courses fulfilling the University and the School of Journalism degree requirements during their first two years of college work, reserving professional course work in journalism for the final two years at the School of Journalism.

Each journalism major is advised by a faculty member in planning a program of courses individually based on the
student's background and career interests.

The program for students designated as majors in Journalism is organized on an upper-division and graduate basis.

When necessary, the School of Journalism makes special arrangements to accommodate handicapped students.

## Undergraduate Studies

Requirements for Admission: Freshmen and sophomores who plan to become journalism majors and who meet the admission requirements of the University are admitted by the Office of Admissions. Such students may stipulate "prejournalism" as their major without special screening by the School of Journalism or compliance with specific requirements.

Each student must see the Chief Adviser of the School of Journalism for assignment to an academic adviser in the student's area of subject-matter interest. In fall term of each year, these assignments are made at the meeting of all new undergraduate students during the Orientation Program. At other times, students are to see the Chief Adviser during the adviser's scheduled office hours.

Prejournalism students who want to change areas of interest and academic advisers within the School during their freshman or sophomore years must see the Chief Adviser for reassignment.

Students in other departments in the University who wish to become prejournalism students during their freshman or sophomore years will apply through the Office of Admissions.

Transfer students from other institutions who want to become prejournalism students must apply through the Office of Admissions. Admissions officers, counselors, and transfer students will be guided by the Transfer Credit Policy statement of the School of Journalism (below). This policy statement is furnished to all institutions in Oregon as part of the Transfer Curricula Recommended by the State System Committee on Community Colleges for Oregon Community Colleges, issued by the Office of Academic Affairs, Oregon State System of Higher Education.

The following courses are open to prejournalism majors: Mass Media and Society (J 224) ; Journalistic Writing (J 250) ; Principles of Advertising (J 341).

Prejournalism students are advised to complete as many as possible of the courses in Arts and Sciences which meet the Group Requirements of the University and, in addition, which are
required and recommended by the School of Journalism; students are also advised to participate in extracurricular journalistic activities, and to learn how to type.

Juniors and seniors are accepted as majors in Journalism. All students who want to become journalism majors, including prejournalism students, who have completed the sophomore year ( 90 credit hours), must apply for admission to the School of Journalism on special forms obtainable from the school office. Applications, including transcripts, must be submitted not later than one month prior to the beginning of the term for which admission is sought. In order to be eligible for admission as a major, the student must have (1) completed 90 or more credit hours of work; (2) substantially satisfied the lower-division requirements of the University ; (3) attained a cumulative grade point average of at least 2.5 (each credit-hour of A counts as 4 points ; a B, 3 points; a C, 2 points; a D, 1 point ; Fs, Ns, and NPs count as 0 points) ; (4) completed with credit Journalistic Writing, J 250. A student must make an acceptable score on the Cooperative English Test and on the School of Journalism Typing Test to be admitted to J 250. These tests should be passed prior to the term in which J 250 is taken. Both tests are given each term (except summer), and J 250 is waived if the CET score is high enough. Since students transferring from other colleges will not have had the opportunity to fulfill requirement (4), they begin their professional studies as prejournalism students. When admitted to the University as prejournalism students by the Office of Admissions, they should see the School of Journalism for adviser assignment.
The School of Journalism supports the Transfer Curricula Recommended by the State System Committee on Community Colleges for Oregon Community Colleges, and calls specific attention to the transfer curriculum for journalism as listed in that document.

The School of Journalism policy on acceptance of transfer credit is as follows:
(A) The School of Journalism will accept for credit and for the fulfillment of its course requirements courses taken and satisfactorily completed at other schools of journalism offering sequences accredited by ACEJ.
However, this acceptance does not waive the requirement of the number of credit hours to be earned at the University of Oregon School of Journalism.
(B) The School of Journalism will accept for "general journalism credit" courses taken and satisfactorily completed at institutions whose sequences are not accredited by ACEJ ; such "general journalism credit" will be included in the 46 -credit-hour limit, but no "general journalism credit" may be used to meet specific course requirements. Students who want to use course work taken at another institution to meet prerequisites for School of Journalism courses may apply to take waiver examinations.
(C) The School of Journalism will accept for "general journalism credit" courses taken for credit at other institutions for work on student publications, student radio and television stations, student magazines, or for commercial, nonacademic media, but such credit may not be used to meet specific course requirements of the School of Journalism and no more than three such credits may be counted in the requirement of 30 upper-division hours. Transfer students who present such credits may find themselves disadvantaged in the number of hours they are permitted to take in the School of Journalism to keep within the 46 -hour limit.
(D) The School of Journalism will accept for credit, and for meeting specific course requirements, and for meeting requirements for certification for secondary-school teaching, courses taken through the Division of Continuing Education when the faculty member teaching such courses is a member of the faculty of the School of Journalism or whose appointment as instructor of the DCE courses has been approved by the faculty of the School of Journalism.
Students who want advice on admission to the School of Journalism should consult the Undergraduate Affairs Committee.
Summary of Admission Requirements: Freshmen and Sophomores: No special requirements. Students should be advised that proficiency in the use of the typereriter is essential.
Juniors and Seniors: All students must submit a special application form, accompanied by transcript, to the School of Journalism. In order to be eligible for admission as a major, the student must have (1) completed 90 or more credit hours of work; (2) substantially satisfied the lower-division requirements of the Unversity;
(3) attained a cumulative grade point average of at least 2.5 (each credit-hour of A counts as 4 points; a B, 3 points; a C, 2 points; a D, 1 point; Fs, Ns, and

NPs count as 0 points) ; (4) completed, with credit, Journalistic Writing, J 250, or passed the Cooperative English Test with a score that is sufficient to waive J 250.
Requirements for Graduation: In addition to meeting the University requirements for the degree of Bachelor of Arts or Bachelor of Science, a student seeking such a degree with a major in journalism must: (1) satisfactorily complete at least 36 hours in journalism courses, of which at least 30 hours must be in upper-division courses, and at least 27 hours must be taken at this School; (2) take no more than a total of 46 hours in journalism courses within the first 186 hours of an undergraduate program (140 of the first 186 credit hours must be earned in liberal arts or other nonjournalism courses) ; (3) satisfactorily complete at least two courses from the group of writing courses specified by the School of Journalism faculty ; (4) satisfactorily complete at least two courses from this group: Law of the Press, History of Journalism, and Journalism and Public Opinion; (4) earn a cumulative University of Oregon grade point average of 2.5 or better ; (6) earn a total of no more than 3 credit hours for J 408, Internship.

In its requirements for an undergraduate major, the School of Journalism places strong emphasis on courses which will provide a broad liberal education. To satisfy the School's graduation requirements, each student majoring in Journalism must complete the following course work in liberal arts disciplines: (1) six courses of at least three credits each in literature (not including courses dealing primarily with film) ; (2) three courses of at least three credits each in history; (3) three courses of at least three credits each in economics; (4) three additional blocks of courses, each block consisting of at least nine related credit hours, from among these areas : anthropology, economics, geography, history, mathematics, philosophy, political science, psychology, religion, science, or sociology. (Courses numbered 199, 200 Search, 400 Search, $400-406$, or 408-410 may not be used to fulfill these requirements.)

In consultation with an adviser, a journalism major selects professional courses which will provide a measure of concentration in a special field of journalism. Suggested courses are as follows:
Advertising: Principles of Advertising (J 341) ; Advertising Copy Writing (J 446) ; Media of Advertising (J
441) ; Advertising Problems (J 444) ; Advertising Layout (J 447) ; Law of the Press (J 485) ; courses selected from the following: Advertising Research (J 448), Advertising Agencies and Departments (J 445), Production for Publication (J 321), Marketing Systems (Mkt 311), Television Workshop (Tc 344), Principles of Public Relations (J 459).
News-Editorial: Photojournalism (J 336) ; Reporting I (J 361) ; Newspaper Editing (J 371) ; Reporting II (J 462) ; Law of the Press (J 485) ; History of Journalism (J 487) ; courses selected from the following: Production for Publication (J321), Magazine Article Writing I and II (J 468, 469), Community and Daily Newspaper Management (J 421), Journalism and Contemporary Affairs (J 495) ; The Journalistic Interview (J 463).
Newspaper Management: Production for Publication (J 321) ; Principles of Advertising (J 341) ; Reporting I (J 361) ; Newspaper Editing (J371); Community and Daily Newspaper Management (J 421) ; Law of the Press (J 485) ; courses selected from the following: Reporting II (J462), Advertising Copy Writing (J 446), Advertising Layout (J 447).
Radio-Television Journalism: RadioTelevision News I and II (J 431, 432) ; Advanced Radio News (J 433); Advanced Television News (J 434) ; courses selected from the following: Seminar: Radio-Television Station Management (J 407), Radio-Television problems (J 407), Reporting I and II (J 361, J 362), Principles of Advertising (J 341), Media of Advertising (J 441), International Journalism (J 491), Radio and Television Script Writing (Tc 347), Production (Tc 444), Television Direction (Tc 445), Radio-Television Programming (Tc 446), Television Workshop (Tc 344).

Magasine Journalism: Production of Publication (J 321), Reporting I (J 361), The Journalistic Interview (J 463), Magazine Article Writing I and II (J 468, 469), Magazine Editing (J 470), Magazine Design and Production (J 471), Writing the Nonfiction Book (J507) ; courses selected from the following: Photojournalism ( J 336), Principles of Advertising (J 341), Newspaper Editing (J 371), Seminar: Science Writing (J 407), Advertising Copy Writing (J 446), Advertising Layout (J 447), Principles of Public Relations (J 459), Law of the Press (J 485).

Public Relations: Principles of Public Relations (J 459) ; Public Relations Writing (J 465) ; Public Relations Problems (J 483) ; Reporting I (J 361) ; Law of the Press (J 485) ; Public Relations Field Studies (J 406 or J 506) ; courses selected from the following: Production for Publication (J 321), Principles of Advertising (J 341), Magazine Article Writing I (J 468), Magazine Editing (J 470), Photojournalism (J 336), Advertising Copy Writing (J 446), Magazine Design and Production (J 471), Journalism and Public Opinion ( J 494), Television Workshop (Tc 344).

Policy on SEARCH courses: In addition to University requirements, the School of Journalism requires that a SEARCH course be approved by a majority of the voting faculty after the faculty has studied the course syllabus and has questioned the proposed instructor. The syllabus must include the course outline and bibliography. A SEARCH course that includes work on a student publication must also involve academic investigation of a body of knowledge germane to the subject of the course.
Policy on Grade Option: (1) all courses regularly offered in the School will be available on a graded or a pass-no-pass basis, except those specifically designated in the catalog and the time schedules as "graded only" or "nongraded only."
(2) For courses taken for undergraduate credit a grade of "pass" is understood to mean work performed at the C level or better. For courses taken for graduate credit, "pass" means work at the level of $B$ or better.
(3) Undergraduate majors will receive credit toward the satisfaction of degree requirements for no more than nine hours of nongraded course work in journalism. Graduate majors will receive no credit toward satisfaction of degree requirements for courses carrying journalism credit taken on a nongraded basis where the basis of grading is optional. Graduate majors will receive credit toward satisfaction of degree requirements for no more than six hours of nongraded work in any other University courses where the basis of grading is optional.
Policy on Grade of D: Credits earned with the grade of $D$, regardless of discipline, are acceptable in meeting graduation requirements. The student should realize, however, that such grades make it difficult to maintain the required cumulative grade average of 2.5 or better.

Secondary-School Teaching of Journalism: For certification as a teacher of journalism in Oregon high schools, the Teacher Standards and Practices Commission requires (1) the satisfaction of certain minimum standards of subject preparation, (2) certain requirements in professional education preparation, and (3) the recommendation of the institution at which the student completes the subject preparation.

State standards for certification are established for a basic (four year) norm and for a standard (five-year) norm. Students are encouraged to meet the five-year norm during undergraduate study.

To meet the state standards in journalism and the requirements for recommendation by the University of Oregon School of Journalism, the student should complete the following program:
(1) Basic Norm. Demonstrated competence or 42 credit hours designed to demonstrate competence in language arts to include:
(a) 15 credit hours of journalism including work in news-writing, copy editing, and high school publications. The School of Journalism requires the following 17 credit hours of course work, or the equivalent areas of demonstrated competence, to meet certification standards : Journalistic Writing (J 250) 3 credit hours ; Mass Media and Society (J 224) 3 credit hours ; Principles of Advertising (J 341) 3 credit hours; Reporting I (J 361) 4 credit hours; Newspaper Editing (J 371) 4 credit hours.
(b) Methods of Teaching Journalism ( I 455 ) is required before permission is granted for student teaching or before certification is granted by the School of Journalism.
(c) A core of 27 credit hours distributed in literature and communication as indicated in the basic language arts norm. The University of Oregon School of Journalism requires the following course work or equivalent course work to meet certification standards: Literature ( 15 credit hours). This work may be American literature, world literature, or English literature, but may not duplicate work credited in meeting the communications requirement below. Communication ( 12 credit hours to include at least one course in each of the following three categories). (i) Written Expression: Short Story Writing (Wr 326) ; Reporting II (J 462) ; Magazine Writing I (J 468). (ii) Oral Expression : Fundamentals of Speech ( RhCm 121) ; Radio-TV Production (Tc 444).
(iii) Cultural Linguistics: Journalism and Public Opinion (J 494); History of English Language (Eng 491) ; Modern English Grammar (Eng 492). (2) Standard Norm. The University will recommend a person for the Standard Teaching Certificate and Standard endorsements upon successful completion of a planned program of teacher education, which plan must be filed with the Office of Teacher Certification in the College of Education at the time the work is initiated. Planning forms may be secured from that office. The planned program must include 12 credit hours designed to develop further teaching competence in language arts in addition to those required for the basic norm, including nine credit hours of journalism.
For specific information regarding requirements for the teaching endorsement in Journalism, students should talk with the School of Journalism Endorsement Adviser for Teacher Education and with the staff of the Office of Secondary Education in the College of Education.

## Graduate Studies

The School of Journalism offers work leading to the Master of Arts or Master of Science degrees. Programs include news-editorial journalism, advertising and public relations, broadcasting, and communication research.
Requirements for Admission: An applicant for admission to graduate study in the School of Journalism must be a graduate of an accredited four-year college or university, must have an undergraduate grade point average of at least 3.00 ( B ), and must submit scores on the Graduate Record Examination.

Students may be conditionally admitted for graduate study if they can offer evidence that a graduate course of study will be pursued successfully. Such evidence should include (1) scores on the Graduate Record Examination and (2) a grade point average exceeding 3.00 earned during the last two years of undergraduate studies. Men or women who have substantial experience in any of the fields of journalism may offer such experience, with the approval of the faculty, in lieu of (1) or (2) for conditional admittance. Advising: An adviser will be appointed for each graduate student in the School by the Dean upon recommendation of the Faculty Committee on Graduate Study.
Requirements for Graduation: Candidates for the master's degree must
earn at least 45 hours of graduate credit, with a cumnulative grade point average of above 3.0. Courses that do not carry graduate credit are not considered in determining the graduate student's grade point average.

A candidate for the master's degree in journalism has three options in fulfilling the requirement of a minimum of 45 graduate credit hours :
(1) 36 credit hours plus an acceptable thesis for which 9 credit hours will be awarded. This option is suggested for students with undergraduate majors in journalism and for those with strong interests in historical, legal, or communication research.
(2) 36 or more credit hours plus an acceptable terminal project for which up to 9 credit hours wil be awarded. This option is suggested for students with strong professional interests in a specific area of the curriculum of the School of Journalism.
(3) 45 credit hours. This option is suggested for students with undergraduate majors in disciplines other than journalism who want broad and comprehensive understanding of the field obtainable through the curriculum of the School.

Each student who chooses option (1) or (2) will be assigned to a faculty member who will supervise the research and writing of the thesis or terminal project. A topic for the thesis or terminal project must be approved by the assigned faculty member before the work is undertaken. A student should register for credit under the appropriate number ( J 503 for thesis or J 509 for terminal project) during the terms in which the research and writing are done.

A student whose undergraduate program did not include the following courses or their equivalent must take them, either before taking graduate courses or concurrently with graduate courses: Principles of Advertising (J 341) 3 credit hours; Reporting I (J 361) 4 credit hours, or Journalistic Writing (J 250) 3 credit hours. These are not graduate level courses and therefore do not provide credits toward the 45 credit hours required for the master's degree. Thus, the total degree program for students with limited undergraduate work in the field may include up to 52 credit hours, and typically may require four or five terms for completion.

All graduate students should expect to be assigned extra work in any undergraduate course they may take. This is usually a term paper not required of undergraduates in the course.

Of the 45 graduate level credit hours
required for completion of degree requirements, at least 30 must be in journalism courses. Students who have not taken undergraduate programs in journalism, and who do not have professional experience in the field, may elect to take up to 45 credits in graduate-level journalism courses. Nonjournalism courses taken must constitute an integrated program of work in a single area or in closelyrelated areas. Scattered work in a variety of areas will not be acceptable.

Graduate students will receive no credit toward satisfaction of degree requirements for courses carrying journalism credit taken on a nongraded basis when the basis of grading is optional. Graduate students will receive credit toward satisfaction of degree requirements for no more than six hours of nongraded work in any other University courses where the basis of grading is optional. Course programs for graduate students are usually planned individually, through consultation with the student's adviser.

It is required, however, that students intending to complete requirements for an advanced degree will include at least three of the following courses in their program (or present evidence that they have previously completed such courses or their equivalent) : Law of the Press (J 485) 3 credit hours; History of Journalism (J 487) 3 credit hours; Public Opinion and Propaganda (J 514) 3 credit hours; Theories of Mass Communication (J 513) 3 credit hours. All master's degree programs must include the following : (a) Three journalism courses or seminars numbered at the 500 level; (b) at least two graduate-credit courses in journalistic writing from the following groups: Radio-Television News II (J 432) 3 credit hours, Advanced Radio News (J 4.33) 3 credit hours, Advanced Television News (J 434) 3 credit hours, Advertising Copy Writing (J 446) 3 credit hours, Reporting II (J 462) 4 credit hours, Public Relations Writing (J 465) 3 credit hours, Magazine Article Writing I (J 468) 3 credit hours, Magazine Article Writing II (J 469) 3 credit hours, Writing the Nonfiction Book (J 507) 3 credit hours, Advertising Message Strategy (J 546) 3 credit hours, Editorial Writing (J 564) 3 credit hours.

Degree candidates who are preparing theses should obtain from the Graduate School office a pamphlet describing the appropriate form and style of the thesis.

Students nearing the completion of their programs should obtain from their
advisers a copy of a check list of steps to be taken and examinations to be passed immediately prior to the awarding of the degree. Each student is responsible for completing all formalities sufficiently in advance of the deadline.

Special Examinations: Each applicant for admission to graduate study must take the Graduate Record Examination. A foreign applicant whose native language is not English must also take the Test of English as a Foreign Language. Upon receipt of examination scores and of transcripts for all college work undertaken, the Faculty Committee on Graduate Study will consider the application.

All graduate students' programs are examined by the faculty of the school during progress toward the master's degree:
(1) Each graduate student in journalism is automatically considered for advancement to candidacy in the term following the completion of 12 credit hours of graduate study.
(2) The student not advanced to candidacy at this evaluation will be given written notice but may be allowed to continue course work until the completion of 24 credit hours of graduate study. At that time a final decision regarding advancement to candidacy will be made.
(3) To be advanced to candidacy a student must have completed at least 12 credit hours of graduate study with a grade average of more than 3.0. At least nine of those hours must be in journalism, including at least two of the following courses: J 513, J 514, J 485, J 487.
(4.) In the term in which the student completes all other requirements for the degree, he or she will take a final oral examination. If the student has written a thesis or terminal project, the examination will be given by that student's thesis or project committee. If the student has not written a thesis or project, the examination will be given by two members of the School of Journalism faculty assigned by the Dean.

Candidates for the M.A. degree must have completed work in a foreign language through the second year of college, or must pass an examination demonstrating equivalent mastery. Candidates for the M.S. degree need not fulfill this requirement.
Foreign Students: Foreign students beginning graduate work at the School of Journalism should plan to spend some time (at least a full term, in most
cases) taking basic courses that do not carry graduate credit, before embarking on graduate level courses.

A firm mastery of English, includling American mass-communications idiom, is necessary for success in professional courses at the graduate level. Foreign students who lack such a mastery find themselves severely handicapped, and should plan to spend five or more terms in residence.

## General Information

Facilities: The School of Journalism is housed in Eric W. Allen Hall, named in memory of the first dean of the School of Journalism. Fully equipped laboratories are provided for newswriting, editing, advertising, radiotelevision news, and photography. Current files of newspapers and trade publications are maintained in the Journalism Reading Room; the University Library has an excellent collection of the literature of mass communications. The School of Journalism receives the regular newspaper teletypesetter monitor services of the Associated Press. The Eric W. Allen Seminar Room, furnished by contributions from friends and alumni of the school, is a center for meetings of journalism seminars and student groups.

The Oregon Newspaper Publishers Association and the Oregon Association of Broadcasters cooperate with the school and the University Placement Service in providing placement services for journalism graduates. The Oregon Scholastic Press also has its headquarters in Allen Hall.
Student Loan Funds: The interest from a $\$ 15,000$ endowment fund, bequeathed to the University by the late Mrs. C. S. Jackson, widow of the founder of the Oregon Journal, provides loans to men students majoring in journalism.

The Arthur and Marian Rudd Loan Fund, established by a gift to the school from an alumnus, provides loans to men or women students majoring in journalism.

A fund established by Zeta chapter of Gamma Alpha Chi, professional society for women in advertising, provides loans for women students majoring in journalism. A fund established and administered by the Oregon Press Women provides loans for senior women majoring in journalism.
Scholarships and Fellowships: A number of scholarships, ranging from $\$ 1,200$ to $\$ 200$, are available to journalism students. Details are available
from the dean or the chairman of the school's scholarship committee.

A limited number of graduate teaching fellowships, carrying stipends ranging from $\$ 1,425$ to $\$ 3,075$ for nine months are also available. Graduate teaching fellows also receive waivers of tuition in accordance with the regulations of the Graduate School. Details are available from the dean or the chairman of the school's graduate committee.

## News-Editorial

## Undergraduate Courses

J 200. SEARCH. Credit hours to be arranged.
J 224. The Mass Media and Society. 3 credit hours. Recommended for prejournalism majors; open to nonmajors. Description and analysis of the various media of mass communication and their effects on society. Nelson, Duncan, Metzler.
J 250. Journalistic Writing. 3 credit hours. Introduction to journalistic practices associated with gathering information, taking notes, interviewing, writing for various mass media audiences. Review of grammar, spelling, sentence structure, punctuation. Lectures and laboratories. Students must pass the Cooperative English Test and the School of Journalism typing test to be eligible to take this course. Required for admission to School of Journalism with major standing ; open to nonmajors. Hart, Halverson.
J 321. Production for Publication. 3 credit hours. The production of news-editorial and advertising material into publications. Printing processes and machinery ; typography and composition methods; technical aspects of letterpress printing and photo-engraving, photo-offset, gravure, and silk-screen process; paper, ink, and color. Metzler.
J 336. Photojournalism. 3 credit hours. News photography: subjects, composition, editorial requirements. Press cameras and darkroom techniques. Documentaries and photo essays. Work of the news photographer. Trends in pictorial journalism. McDonald.
J 361. Reporting I. 4 credit hours. Basic training in news-gathering. Extensive writing under time pressure, including a variety of assignments-straight news, features, interviews, speeches. Typing ability required. Lectures, conferences, laboratory. Prerequisite : J 250 . Duncan, Halverson, Rarick.
J 371. Newspaper Editing. 4 credit hours. Instruction and practice in copy-editing and headline-writing for the newspaper; emphasis on grammar and style. Instruction and practice in problems involved in evaluation, display, make-up and processing of written and pictorial news matter under time pressure. Lectures and laboratory. Prerequisite: J 361. Halverson.
J 400. SEARCH. Credit hours to be arranged.
J 401. Research. Credit hours to be arranged. J 403. Thesis. Credit hours to be arranged. J 405. Reading and Conference. Credit hours to be arranged. No-grade course.
J 406. Special Problems. Credit hours to be arranged. No-grade course.
J 409. Practicum: Teaching Methods. 3 credit hours. Active participation in the teaching program under faculty supervision. Consent of instructor is required. May be repeated for credit.

J 410. Experimental Course. Credit hours and topics to be arranged.

## J 495. Journalism and Contemporary Affairs. 3 credit hours. Examination of

 current problems in journalism; evaluation of governmental and other public policies affecting the mass media ; trends in mass communications. Prerequisite : senior standing. Duncan.
## Upper-Division Courses Carrying Graduate Credit

J 407. Seminar. (G) Credit hours to be arranged.
Writing the Nonfiction Book.
Science Writing.
Reporting of Public Affairs.
J 408. Workshop: Internship. (G) 1-3
credit hours. Work experience, under faculty guidance, on a newspaper or magazine. Consent of the Dean required. May be repeated to a total of 3 credits.
J 421. Community and Daily Newspaper Management. (G) 3 credit hours. Suryey of community and daily newspaper economics; cost and revenue analyses; production technology ; circulation problems and developments; basic accounting; administration and coordination of advertising, editorial, and production departments; week-long internship at a newspaper. Halverson, McDonald.
J 455. Methods of Teaching Journalism. (G) 3 credit hours. The teacher's role in guiding student publications in secondary schools; methods of teaching journalism. Hartman.
J 462. Reporting II. (G) 4 credit hours. Newspaper reporting of legislative and executive governmental bodies; political news and other special news areas ; civil and criminal courts and appellate procedure. Prerequisite: J 361. Halverson, Duncan.
J 463. The Journalistic Interview. (G) 3 credit hours. Reading, discussion, and laboratory exercises to aid nonfiction writers in the development of skills in gathering information through asking questions. Analysis of literature and research findings on techniques of listening, nonverbal communication, and psychological dynamics of the interview relationship in journalistic situations. Metzler.
J 468. Magazine-Article Writing I. (G) 3 credit hours. Writing magazine feature articles; book and movie reviewing for the mass media; study of the problems of marketing magazine manuscripts. Prerequisite: J 250. Metzler, Nelson.
J 469. Magazine-Article Writing II. (G) 3 credit hours. Writing and marketing magazine articles. Individual conferences. Prerequisite: J 468. Metzler, Nelson. J 470. Magazine Editing. (G) 4 credit hours. Survey and history of magazines; principles and problems of magazine editing ; planning, content selection, manuscript revision, copy editing, caption and title writing ; editorial responsibility. Lectures, exercises, and project ; laboratory. Prerequisite : senior standing. J 321 strongly recommended. Metzler, Nelson.
J 471. Magazine Design and Production. (G) 3 credit hours. Role of the magazine editor in working with art directors in publication work. Survey of problems in designing covers, pages, and spreads for magazines; selecting type faces; using display typography and art to increase the effectiveness of the written word; preparing copy and art for publication. Consent of instructor is required. Nelson.

J 472. Caricature and Graphic Humor. (G) 3 credit hours. Appreciation and criticism of cartoons and comics used in the mass media ; discussion of historical aspects; reviewing cartoon literature and collections ; developing ideas for editorial cartoons, gag cartoons, comic strips and panels, illustrative cartoons. Drawing ability is useful but not vital to complete some of the assignments. Nelson.
J 485. Law of the Press. (G) 3 credit hours. The constitutional guarantee of freedom of the press; principal Supreme Court decisions; legal status of the press as a private business and as a public utility ; governmental activity toward improving the press; legal controls of publication; libel, right of privacy, copyright, contempt of court, censorship, and regulation of broadcasting. Hart.
J 487. History of Journalism. (G) 3 credit hours. Study of the changing character of the mass media in the United States since colonial times. Emphasis on theories of the press and the relationship of the mass media to the society they have served. Halverson.
J 491. International Journalism. (G) 3 credit hours. A survey of media of mass communication (press and broadcast systems) throughout the world: their structure, chief characteristics; historical background ; differing fundamental concepts of their role and conflicting theories of control ; international news services and foreign correspondence; major newspapers of the world; growth and attendant problems in the developing nations. Duncan.
J 494. Journalism and Public Opinion. (g) 3 credit hours. The formation, reinforcement, and change of opinions. The role of major social and political institutions, with emphasis upon the mass media of communications. Lemert.

## Graduate Courses

J 501. Research in Journalism. Credit hours to be arranged.
J 502. Supervised College Teaching. Credit hours to be arranged.
J 503. Thesis. Credit hours to be arranged. No-grade course.
J 505. Reading and Conference. Credit hours to be arranged.
J 506. Special Problems. Credit hours to be arranged. No-grade course.
J 507. Seminar. Credit hours to be arranged. Economics of the Newspaper.
Literature of Journalism.
History of Journalism.
Legal Research for Journalists.
Content Analysis.
Writing the Nonfiction Book.
J 509. Practicum. Credit hours to be arranged.
J 510. Two Approaches to Criticism of the
Mass Media. 3 credit hours. Traditional, humanistic, "Social Responsibility" approach compared with empirical approach to analysis and criticism of media performance. Advantages and disadvantages of each. Work in applying each approach to specific cases. Open to seniors by consent of instructor. Lemert.
J 514. Public Opinion and Propaganda.
3 credit hours. Analysis of research literature, with emphasis upon finding analogues for research findings in decisions and choices made by mass media decision-makers. Research in attitude change processes, and source, message, channel, and receiver variables in the mass communication process. Prerequisite: J 513. Lemert.

J 564. Editorial Writing. 3 credit hours.
Writing of analysis and opinion for the media of mass communication ; examination of methods of formulating editorial policy ; operation of editorial pages and editorial sections; trends in the use of the opinion function.

## Advertising and

Public Relations

## Undergraduate Courses

J 200. SEARCH. Credit hours to be arranged
J 341. Principles of Advertising. 3 credit hours. Advertising as a factor in the distributive process; the advertising agency; the campaign; the function of research and testing; the selection of media: newspaper, magazine, broadcasting, outdoor advertising, direct mail. Ewan, Winter, Cook.
J 401. Research. Credit hours to be arranged.
J 403. Thesis. Credit hours to be arranged.
J 405. Reading and Conference. Credit hours to be arranged.
J 406. Special Problems. Credit hours to be arranged. No-grade course.
J 409. Practicum: Teaching Methods.
3 credit hours. Active participation in the teaching program under faculty supervision. Consent of instructor is required. May be repeated for credit.
J 410. Experimental Course. Credit hours arranged.
J 459. Principles of Public Relations. 3 credit hours. Theory and practice of public relations as viewed by business, government, and civic and public service organizations; study of mass media as publicity channels; role of the public relations practitioner; public relations departments and agencies. Open to nonmajors. Ewan, Cook.

## Upper-Division Courses Carrying Graduate Credit

J 407. Seminar. (G) Credit hours to be arranged.
Institutional Communications.
J 408. Workshop: Internship. (G) 1-3 credit hours. Work experience, under faculty guidance, in an advertising or public relations department or agency. Consent of the Dean required. May be repeated to a total of 3 credits.

## J 441. Media of Advertising. (G) 4 credit

 hours. Evaluation of newspapers, magazines, radio, television, and outdoor media as vehicles for advertising ; selling, planning, buying procedures; cost-efficiencies; demographic considerations related to marketing and advertising objectives; media department or ganization. Prerequisites: Junior standing and J 341. Ewan, Winter, Cook.J 444. Advertising Campaigns. (G) 4 credit hours. Students have opportunity to cultivate judgment through consideration of actual marketing and merchandising problems, in the solution of which advertising may be a factor. Prerequisite : J 341, J 441, J 442, J 446, J 447; senior standing. Winter.
J 445. Advertising Agencies and Departments. (G) 3 credit hours. Role of the advertising agency in the creation of advertising materials, marketing plans, and research ; structure and function of the agency ; client relations; merchandising; personnel ; financial operations, legal problems. The company
advertising department. Prerequisite: J 341, senior standing. Ewan.
J 446. Advertising Copy Writing. (G) 3 credit hours. Theory and practice in writing advertising copy. Study of style and structure, with emphasis on persuasive writing. Lectures and laboratory. Prerequisite: J 250, J 341 . Crawford, Ewan, Winter.
J 447. Advertising Layout. (G) 3 credit hours. Instruction and practice in graphic design for advertising. Work with type and illustrations. Consideration given to all media. Prerequisite: J 341. Ewan, Nelson.
J 448. Advertising Research. (G) 3 credit
hours. Application of standard survey methodology and behavioral science techniques to the determination of the effectiveness of print and broadcast advertising. Emphasis on means of determining the accomplishment of stated communications objectives in terms of pre- and post-testing advertising copy and in terms of measuring media efficiency. Special attention is afforded secondary research sources. Prerequisite: J 341, consent of instructor. Winter.
J 449. Advertising and Society. (G) 3 credit hours. Detailed discussion and reading in the socio-economics of advertising. Opportunity to survey the literature of advertising and treat, the legal, ethical, and moral considerations incumbent in an advertising career. Prerequisite : senior or graduate standing, consent of instructor. Crawford, Winter.
J 465. Public Relations Writing. (G) 3 credit hours. Preparation of press conferences, press kits, and news releases ; institutional advertising copy, executive speeches, dissemination of publicity material through the broadcasting media. Prerequisite: J 250, J 361, J 459. Ewan, Cook.
J 483. Public Relations Problems. (G) 3 credit hours. Use of research, decision processes, and program design in the solution of public-relations problems. Application of principles and techniques in the public relations programs of profit and nonprofit institutions. Role of the mass media of communication in such programs. Ethics of public relations. Prerequisite: J 459. Ewan, Cook.

## Graduate Courses

J 501. Research in Journalism. Credit hours to be arranged. No-grade course.
J 502. Supervised College Teaching. Credit hours to be arranged.
J 503. Thesis. Credit hours to be arranged. No-grade course.
J 505. Reading and Conference. Credit hours to be arranged. No-grade course.
J 506. Special Problems. Credit hours to be arranged. No-grade course.
J 507: Seminar: Public Relations in Higher Education. 2-3 credit hours. Theory and techniques in achieving appropriate relationships with the various publics of institutions of higher education through interpersonal and mass communications. Primarily designed for advanced degree candidates interested in college and university communications. Open to nonmajors with instructor's consent. A no-grade course. Ewan. Not offered in 1978-79.
J 509. Practicum. Credit hours to be arranged.
J 510. Experimental Course. Credit hours to be arranged.
J 520. Public Relations Planning and Administration. 3 credit hours. Intended
for graduate students in business, education,
public affairs, recreation management, etc., as well as journalism majors. Each student constructs a comprehensive public relations plan in his or her field of study. Course assumes no previous academic work in public relations. Ewan, Cook.

## J 546. Advertising Message Strategy. 3

 credit hours. Advanced theory and practice in concepts of advertising copy. Emphasis on the search for advertising ideas and their development into message strategy, visual and verbal, for a variety of advertising media. Lectures and laboratory develop variety in writing style for varied audiences. Prerequisite : J 446 or J 447 or equivalent. Crawford.
## Broadcasting:

J 200. SEARCH. Credit hours to be arranged.
J 401. Research. Credit hours to be arranged.
J 403. Thesis. Credit hours to be arranged.
J 405. Reading and Conference. Credit hours to be arranged.
J 406. Special Problems. Credit hours to be arranged. No-grade course.
J 410. Experimental Course. Credit hours and topics to be arranged.
J 431. Radio-Television News I. 3 credit hours. Gathering and writing news for broadcast media. Emphasis on broadcast style, basic aspects of radio-television newswriting, and radio-news operations. Lectures, individual conferences, and laboratory. Prerequisite: J 250. Nestvold.
Tc 344. Television Workshop. 3 credit hours. Theory and practice of television broadcasting.
Tc 347. Radio-Television Script-Writing. 3 credit hours. Radio and television writing techniques including theory and practice in writing for major styles of continuity. Prerequisite : junior standing.

## Upper-Division Courses Carrying Graduate Credit

J 407. Seminar: Radio and Television Management. (G) 3 credit hours. Basic problems of managing radio and television stations, including management attitudes toward audiences, programming, pressure groups, the FCC and its regulations, CATV.
Social, economic, and legal responsibilities of a broadcasting operation. Consent of instructor is required. Mueller.

## I 407. Seminar: Radio-Television Prob-

 lems. (G) 3 credit hours. Current problems, issues, and controversies in radio and television in the United States, including CATV, program origination, public-access channels; responsibility of broadcast news ; political broadcasting and government regulations; fairness doctrine and broadcast editorializing diversity theory; ratings and research.Consent of instructor is required. Nestvold.
J 408. Workshop: Internship. (G) 1-3 credit hours. Work experience, under faculty guidance, in a radio or television news department. Consent of the Dean required. May be repeated to a total of 3 credits.

## J 432. Radio-Television News II. (G) 3

 credit hours. Advanced aspects of the preparation, reporting, and broadcasting of radio-television news. Emphasis on television newswriting and reporting, the broadcast documentary, and interviewing. Lectures and laboratory. Prerequisite: J 431. Nestvold.J 433. Advanced Radio News. (G) 3 credit hours. Special problems and opportunities for gathering, writing, editing, producing, and presenting news for radio broadcasting. Experience with campus radio facilities. Consent of instructor is required. Nestvold. J 434. Advanced Television News. (G) 3 credit hours. Special problems and opportunities for gathering, writing, editing, taping, producing, and presenting the news for television broadcasting. Experience with campus television facilities. Consent of instructor is required. Nestvold.
Tc 444. Concepts in Visual Production. (G) 3 credit hours. The study of the processes by which ideas are transformed into visual language, through an analysis of various forms of visual representation. Prerequisite : BC 345, or equivalent.
Tc 445. Television Direction. (G) 3 credit hours. Theory and technique of television direction explored through group exercises and individual projects. Prerequisite : BC 345.

Tc 446. Television Programming. (G) 3 credit hours. Analysis of values, trends, and procedures in broadcast programming schedules; problems in planning program structure to meet community and public service needs.

## Communication Research

## Graduate Courses

J 501. Research in Journalism. Credit hours to be arranged.
J 502. Supervised College Teaching. Credit hours to be arranged.
J 503. Thesis. Credit hours to be arranged. No-grade course.
J 505. Reading and Conference. Credit hours to be arranged.
J 506. Special Problems. Credit hours to be arranged. No-grade course.
J 507. Seminar. Credit hours to be arranged.
J 509. Practicum. Credit hours to be arranged.

J 510. Experimental Course. Credit hours to be arranged.
J 512. Communication Research Methods. 3 credit hours. Selection and planning of research studies ; class does research project together, with instruction in appropriate methodology and basic statistical analysis. A beginning course in graduate research. Lemert, Rarick.
J 513. Theories of Mass Communication. 3 credit hours. The communication process; audiences of the mass media; media competition ; attitudes of communicators; functions and dysfunctions of media activities. Lemert, Rarick.
J 514. Public Opinion and Propaganda. 3 credit hours. Analysis of research literature, with emphasis upon finding analogues for research findings in decisions and choices made by mass media decision-makers. Research in attitude change processes, and source, message, channel, and receiver variables in the mass-communication process. Prerequisite: J 513. Lemert.


## School of

## Law

## Faculty

Chaplin D. Clark, LL.M., Dean, Professor (water resources law, legal profession, property). A.B., 1952, LL.B., 1954, Kansas ; LL.M., Columbia, 1959; Kansas bar, 1954, Oregon bar, 1965.
C. Edzein Baker, J.D., Assistant Professor (constitutional law, jurisprudence, legislative and administrative processes, law and economics). B.A., Stanford, 1969 ; J.D., Yale, 1972.

Wendell M. Basye, J.D., Professor (business planning, estate and gift taxes, estate planning, federal income tax, partnerships and corporations).
A.B., Nebraska, 1941 ; J.D., Virgina, 1947; West Virginia bar, 1948. (On
leave, spring semester, 1979.)
Donald W. Brodie, LL.B., Professor (administrative law, labor law, regulated industries). B.A., Washington, 1958 ; LL.B., New York University, 1961; Washington bar, 1961. (On leave, fall semester, 1978.)

John E. Bonine, L.L.B., Associate Professor (environmental law). A.B., Stanford, 1966 ; L.L.B., Yale, 1969 ; California bar, 1970 ; Oregon bar, 1977.

Barbara A. Caulfield, J.D., Assistant Professor (criminal law and procedure, juvenile law, law, medicine, and forensic science, trial practice laboratory).
B.S., 1969, J.D. cum laude, 1972,

Northwestern University ; Illinois bar, 1972. (On leave, 1978-79.)

George L. Daweson, J.D., Associate Professor (commercial law, trusts and estates). A.B., Princeton, 1966 ; J.D., University of Chicago, 1969 ; Colorado bar, 1970. (On leave, 1978-79.)

Dazid B. Frohnmayer, J.D., Professor (jurisprudence, legislative and administrative processes, torts). B.A.,
Harvard, 1962 ; B.A., 1964, M.A., 1971, Oxford; J.D., California, Berkeley, (Coif) 1967 ; California bar, 1967, Oregon bar, 1971.

Ronald C. Griffin, LL.M., Assistant Professor (consumer protection, con-
tracts, government contracts). B.S., Hampton Institute, 1965 ; J.D., Howard University, 1968 ; LL.M., Virginia, 1974 ; District of Colımbia bar, 1970.

Douglas A. Haldane, LL.M., Assistant Dean and Assistant Professor (criminal practice clinical program-prosecution, trial practice laboratory). B.A., 1967, J.D., 1970, Texas ; LL.M., Harvard, 1976; Oregon bar, 1970.

Richard G. Hildreth, J.D., Visiting Professor (coastal law, property, real estate transactions). B.S.E., 1965, Michigan College of Engineering ; J.D., Michigan (Coif) ; Diploma in Law, 1969, Oxford University; Diploma in Law, 1973, University of Stockholm ; California bar, 1969.

Jon L. Jacobson, J.D., Professor (contracts, international law, ocean resources). B.A., 1961, J.D., 1963, Iowa (Coif) ; California bar, 1964.

Laird Kirkpatrick, J.D., Assistant Professor (civil practice clinical program, civil rights litigation, evidence, Oregon practice and procedure). A:B., cum laude, Harvard, 1965 ; J.D., Oregon (Coif), 1968; Oregon bar, 1968. (On leave, 1978-79.)

Frank R. Lacy, J.S.D., Professor (civil procedure, creditors rights, evidence, Oregon practice and procedure, restitution and equitable remedies). A.B., Harvard, 1946 ; J.D., Iowa, (Coif) 1948 ; LL.M., 1958, J.S.D., 1971, New York University; Iowa bar, 1948, Oregon bar, 1949.

Fredric R. Merrill, J.D., Professor (civil procedure, evidence, federal courts, legal profession). B.A., 1959, J.D., 1961, Michigan ; Oregon bar, 1962. (On leave, 1978-79.)

## Ralph James Mooney, J.D., Associate

 Professor (American legal history, commercial law, contracts). B.A., Harvard, 1965 ; J.D., Michigan, (Coif) 1968; California bar, 1968.Peter A. Ozanne, J.D., Assistant Professor (criminal defense clinic, evidence
trial practice laboratory). B.A., Washington, 1967 ; J.D., Stanford, 1971 ; California bar, 1971 , Oregon bar, 1974.

George M. Platt, LL.B., Professor (local government law, secured land transactions, urban development problems, urban land-use law). B.S., 1948, LL.B., 1956, Illinois; Illinois bar, 1956. (On leave, fall semester, 1978.)

Margaret J. Radin, J.D., Assistant Professor (criminal law and procedure, legal research and writing, property, antitrust). A.B., Stanford, 1963 ; M.F.A., Brandeis, 1965 ; J.D., Southern California, (Coif) 1976; California bar, 1976, Oregon bar, 1978. (On leave, 1978-79.)

William D. Randolph, J.D., Professor (business planning, corporate reorganization, partnerships and corporations, securities regulation). B.S., 1948, J.D. (with honors), 1950, Illinois (Coif) ; Illinois bar, 1950 ; California bar, 1962.

Milton L. Ray, J.D., Professor (business planning, estate planning, estate and gift taxes, federal income tax, legal issues in accounting, state and local taxation). B.A., Rochester, 1947; J.D., University of Chicago, (Coif) 1950 ; Illinois bar, 1950, California bar, 1964. CPA (Oregon).

Susan J. Ross, J.D., Visiting Associate Professor (trusts and estates, estate and gift taxes). B.A., 1966, J.D., magna cum laude, Pennsylvania, 1969 (Coif) ; New York bar, 1971, New Mexico bar, 1976.

Eugene F. Scoles, J.S.D., Distinguished Professor (conflict of laws, trusts and estates). A.B., 1943, J.D., 1945, Iowa (Coif) ; LL.M., Harvard, 1949; J.S.D. Columbia, 1955 ; Dean, School of Law, 1968-1974. Iowa bar, 1945, Illinois bar, 1946.

Don W. Sears, J.D., Visiting Professor (commercial law, labor law). B.S., 1946, J.D., 1948, Ohio State ; Ohio bar, 1949, Colorado bar, 1961.

Harrey J. Shulman, J.D., Assistant Professor (civil procedure, legal profession). B.S., Maryland, 1969 ; J.D.,
magna cum laude, Michigan, 1972 (Coif) ; Maryland bar, 1972, District of Columbia bar, 1977.

Richard H.Surles, Jr., J.D., M.LL., Professor and Law Librarian (legal research and writing). B.A., Texas A \& M, 1963 ; J.D., Houston, 1968 ; M.LL., Washington, 1969 ; Colorado bar, 1971.

Peter N. Swan, LL.B., Professor (admiralty, antitrust law, conflict of laws, law and social science, torts ).
B.S., 1958, LL.B., 1961, Stanford; California bar, 1962, United States Supreme Court bar, 1967.

Maxine S. Thomas, J.D., Assistant Dean and Assistant Professor .B.A., 1970, J.D., 1973, Washington; Washington bar, 1973.

Herbert W. Titus, LL.B., Professor (administration of criminal justice, constitutional law, criminal law and procedure, legal perspectives). B.A., Oregon, 1959 ; LL.B., Harvard, 1962 ; Oregon bar, 1962.

Dominick R. Vetri, J.D., Professor (copyrights, federal courts, torts). B.S.M.E., New Jersey Institute of Technology, 1960 ; J.D., Pennsylvania (Coif) 1964 ; New Jersey bar, 1965 , Oregon bar, 1977.

Charles F. Wilkinson, LL.B., Assistant Professor (administrative law, environmental law clinic, Indian law, natural resources). B.A., Denison University, 1963 ; LL.B., Stanford, 1966 ; Arizona bar, 1967, California bar, 1969, Oregon bar, 1977.

## Faculty Emeriti

Lois I. Baker, M.A., Law Librarian; Professor Emerita of Library Administration. B.A., 1927, M.A., 1932,
Oregon ; Cert., 1935, California ; at Oregon since 1935.

Frank J. Barry, LL.B., Professor Emeritus. A.B., California, Los Angeles, 1934 ; LL.B., Loyola University, Los Angeles, 1941 ; at Oregon, 19691977. Arizona bar, 1946, Oregon bar, 1975.

Orlando John Hollis, J.D., Distinguished Professor Emeritus. B.S., 1926, J.D., 1928, Oregon (Coif) ; at Oregon 1931-1974. Acting President, University of Oregon, 1944-45, Dean, School of Law, 1945-1967. Oregon bar, 1928.


The University of Oregon School of Law, established in 1884 in Portland, was moved to Eugene in 1915 and reorganized as a regular division of the University. The School was admitted to the Association of American Law Schools in 1919, and the standards of the school were approved by the American Bar Association in 1923.

The Law Library has shelf space for 120,000 books and is designed to permit expansion. Spacious reading rooms and numerous individual study carrels are available for student use. The holdings of the Law Library exceed 100,000 volumes, including complete case reports of the National Reporter System, complete state reports from colonial times to the establishment of the Reporter System, a substantial collection of English and Canadian case law, codes and compilations of state and federal statute law, and standard legal digests and encyclopedias. The periodical collection includes 650 legal journals. An excellent collection of publications relating to Oregon territorial and state law includes an extensive file of Oregon Supreme Court briefs.

The three-story Law Center, a new building completed in September, 1970, houses the School of Law. The Law Center will accommodate 500 students and thirty faculty members. Modern classrooms, seminar rooms, a mock law office and a courtroom with videotape facilities are provided; student facilities include a student bar association office, lounge, typing room, locker room, and offices for the editorial board of the Oregon Law Review.

## Degrees and Curriculum

The School of Law offers a professional curriculum leading to the Doctor of Jurisprudence degree.

Students who have been admitted to the School of Law, who have completed courses in law aggregating 85 semester hours of satisfactory credit, and who have otherwise satisfied the requirements of the University and the School of Law, will be granted the degree of Doctor of Jurisprudence (J.D.), provided that they: (1) obtain (at least two years before completing work for the J.D. degree) the Bachelor of Arts, Bachelor of Science, or an equivalent degree from this University or some other institution of recognized collegiate rank; (2) have been a fulltime law student at the School of Law for at least 90 weeks or the equivalent ; (3) comply with such other requirements as may from time to time be
imposed. The School of Law reserves the right to modify its curriculum and graduation requirements at any time. Students in the School of Law may accrue up to five semester credits of the required 85 semester hours by successfully completing graduate level courses or seminars in the University of Oregon relevant to their program of legal studies, if such courses or seminars are approved by the dean of the School of Law in consultation with the School of Law Curriculum Committee.

A total of three years of full-time resident professional study in the University of Oregon School of Law or another law school of recognized standing is required for the J.D. degree. Except in unusual circumstances, the last two years must be in residence at the University of Oregon School of Law. (See also the admission requirements for transfer applicants and visiting students.)

The curriculum of the School of Law provides a thorough preparation for the practice of law. The School of Law seeks to have the student acquire knowledge not only of legal doctrine, but also of the judicial process and of the social, economic, and political problems with which lawyers must deal. The method of instruction requires an intensive exercise of analytical skills.

Because the curriculum is arranged to present fundamental topics of law during the first year, the first-year program is prescribed. In order to stimulate involvement in classroom discussion, every effort is made to assure first-year students of at least one class with an enrollment limit of twenty-five students.

All second- and third-year courses are elective except The Legal Profession (L 549 ), which is required. Counseling and information are available to assist students in selecting courses most closely related to their professional goals. The scope of the curriculum is progressively enriched by the addition of courses, seminars, clinics, and research and writing programs that explore the role of law in new areas of social and economic importance, assist students in developing a broad range of legal skills, and stress a close student-faculty relationship.

Substantial participation in classroom discussion is an essential factor in legal education. Credit for any course may be denied for irregular attendance. Classes are scheduled Monday through Friday and some classes or examinations may be scheduled on Saturday. The School of Law does not offer an evening or part-time program.

Research and Writing Requirements: During the second year of study in the School of Law, each student must complete a writing assignment designed to improve legal writing skills and the ability to analyze legal problems. This assignment must be completed before a student may begin the third year of study in the School of Law.

During the third year of study in the School of Law, each student must complete a research and writing assignment designed to test analytical and creative ability to consider and develop solutions in depth for one or more legal problems. This assignment must be completed before a student will be granted a professional law degree.

Students may satisfy these research and writing requirements by electing from the following alternatives: (1) Advanced Appellate Advocacy Seminar (Satisfies second-year requirement only.) (2) Any faculty-supervised writing assignment whether or not undertaken in connection with a course or seminar. (Satisfies second-year requirement only.) (3) Any facultysupervised research paper whether or not undertaken in connection with a course or seminar. (Satisfies either requirement.)
Clinical Experience Program: The School of Law offers five clinical programs as a regular part of its curriculum. In addition, a legislative workshop is offered during the regular sessions of the Oregon Legislative Assembly.

All clinical experience programs are under the direct supervision of a faculty member and include a strong academic component. Students in the clinical programs usually are qualified to make court appearances under the ThirdYear Student Practice Rule which has been adopted by the Oregon Supreme Court.
The Civil Practice Clinical Program provides field experience at the Lane County Legal Aid Service. This program enables law students, under the supervision of an attorney, to represent clients eligible for legal assistance and to develop skills in interviewing, counseling, drafting, negotiating, discovery, and litigation.
The Criminal Defense Clinic allows law students, under the supervision of an attorney, to handle cases of persons eligible for legal assistance through the Lane County Public Defender Office. The clinic is designed to develop advocacy skills in the context of criminal defense representation.
The Prosecution Clinic in the Crimina! Practice Clinical Program provides
students with exposure to some aspects of the criminal justice system as a complement to basic classroom sessions. Students engage in field work, under the supervision of attorneys in a number of local prosecutor's offices, designed to develop competence in trial preparation and ability, and in other prosecutorial functions.

Students in the Corrections Clinic in the Criminal Practice Clinical Program assist prison inmates in the preparation and filing of habeas corpus petitions in the United States District Court. The focus of the field work and class sessions in this clinic is on the interviewing and counseling of clients and on the legal problems of the corrections system.

The Environmental Law Clinical Program places some students with legislative and administrative agencies at the local, state, and federal levels, and enables the students to follow the work of these agencies as it pertains to environmental issues and to conduct legal research and prepare written memoranda. Other students are involved, under attorney supervision, in environmental litigation.

The Legislative Issues Workshop is offered during each regular session of the Oregon Legislative Assembly. Students, who are placed as interns with a legislator or legislative committee, are involved in legal research and in the preparation of reports pertaining to issues before the legislature.
Certificate of Specialty in Ocean Resources: Second- and third-year students at the School of Law are eligible to begin developing a specialty in the field of Ocean Law. Students who satisfactorily complete one of two programs will receive a "Statement of Completion" to that effect signed by the Dean and the Director of the Ocean Resources Law Program. A Statement of Completion may be obtained through either of the following programs: (1) completing seminars in Ocean Resources and Coastal Law, and completing any combination of the following courses and seminars totaling at least nine hours of credits: Admiralty, Water Resources Law, International Law, Transnational Legal Problems, Environmental Quality, International Institutions, and Natural Resouirces; or (2) employment for at least one academic year as a Research Assistant in the Ocean Resources Law Program, and satisfactory completion of a publishable research paper dealing with an ocean-law topic approved by the Ocean Resources Law Program Director. Further information may be
obtained from the Director of the Ocean Resources Law Program, University of Oregon, School of Law, Eugene, Oregon 97403.
Summer Session: The School of Law offers an eight-week summer session which is open to law students who have completed at least one year of law work and who are in good standing at a law school accredited by the American Bar Association. Summer session students may earn up to eight semester hours of law school credit. Summer session is not open to beginning law students.

Students not currently enrolled at the University of Oregon School of Law do not become degree candidates at the School of Law by attending summer session, but remain candidates at the law school in which they are currently enrolled.

Direct inquiries concerning summer session courses of instruction and admission to the Director, School of Law Summer Session, University of Oregon School of Law, Eugene, Oregon 97403.

## Programs and Activities

The Oregon Law Review has been in continuous publication since 1921, and enjoys a reputation for sound scholarship. Preparation of each issue is the responsibility of the student editorial staff, with assistance from a faculty editorial adviser. The Review not only serves the legal profession, but also provides students with a stimulus to legal research and productive scholarship.
Moot Court: The School of Law participates in the National Moot Court Competition. Two teams are entered each year ; their efforts are supervised by a student Moot Court Board and a faculty adviser. In addition, a moot court tournament is conducted in the school through the Advanced Appellate Advocacy seminar, and first-year stiudents are offered moot court experience.

The School of Law also participates in the National Mock Law Office Competition. This competition involves an interview with a "client" and the preparation of a memorandum concerning the case. Competitors are judged on interviewing techniques, legal analysis, and preparation of the memorandum.

The School of Law also takes part in the International Law Moot Court Competition.
Order of the Coif: The Order of the Coif, the national law school honor
society, maintains a chapter at the University of Oregon School of Law. The Order of the Coif encourages high scholarship and advances the ethical standards of the legal profession. Members are selected by the faculty from among those students in each third-year class who rank in the highest ten per cent of the class in scholarship. Character, as well as scholarship, is considered in selecting members.
AM Jur Awards: The School of Law participates in the AM Jur Prize Awards Program established by the Lawyers Co-operative Publishing and Bancroft-Whitney Company. Specially bound book awards are presented to the highest ranking student in each of a number of law school courses.
Student Bar Association: The Student Bar Association represents the student body of the School of Law in matters of particular concern to students. Through such means as representation on student-faculty committees, the Student Bar Association participates in the development of School of Law policy. In addition, the Student Bar Association meets the needs of a diverse student body by sponsoring a spectrum of activities ranging from intramural athletics to a law-student newspaper.
Organizations: Extracurricular student organizations at the School of Law include chapters of the Law Students Civil Rights Research Council, the American Civil Liberties Union, the International Law Society, Land, Air \& Water (LAW) Student Research Group, Minority Law Students Association, Women's Law Forum, Phi Alpha Delta, and Phi Delta Phi.
Placement: The School of Law maintains its own placement service. Employers interested in hiring graduating students for permanent positions or first- and second-year students for summer clerkships consult the Placement Office. Students are informed of job opportunities and the Placement Office arranges for many employers to come to the School to conduct interviews. The Placement Office also solicits job inquiries from employers, provides assistance in the preparation of personal resumés, and offers advice on meeting prospective employers and interviewing.

Slightly more than 90 per cent of the 1974 and 1975 graduates of the School of Law returned placement questionnaires distributed by the Placement Office. Of these graduates, 85 per cent had obtained law or law-related jobs within six months of graduation. Of the graduates who reported their job
placements, 46 per cent were engaged in private legal practice, and 39 per cent were placed in legally related positions, working as attorneys for such organizations as public interest law firms, legal aid clinics, governmental agencies, and corporations, as well as serving as judicial clerks. An average starting salary of $\$ 12,950$ was reported by the 53 per cent of the 1975 graduates who provided information on the salaries of their legal positions to the Placement Office.

## Admission

Policy of Nondiscrimination: The School of Law complies with the Affirmative Action statement of the University, which reads as follows: "The University of Oregon, a member of the Oregon State System of Higher Education, prohibits discrimination based on race, color, religion, sex, age, handicap or national origin. This policy implements various federal and state laws, Executive Orders, Title IX and its regulations, and applies to employment, admission, education, and facilities. Direct related inquiries to Myra T. Willard, Director, Affirmative Action Office, 472 Oregon Hall, University of Oregon, (504) 686-3123."
Prelaw Preparation: The School of Law does not prescribe any particular form of prelegal education. Intellectual maturity and breadth of educational background are considered more important than particular subject matter.

In general, the Committee on Admissions prefers a liberal undergraduate background to one that is narrowly specialized, and a thorough training in some broad cultural field is usually favored. In addition, the School of Law emplasizes the importance of welldeveloped writing skills. Concentration in courses given primarily as vocational training reduces a student's chances for admission.

Applicants also will be expected to have undertaken an academically challenging course of study. Students with a large number of ungraded or pass-undifferentiated hours may be at a distinct disadvantage with regard to selection for admission to the School of Law.

Students who want to obtain additional information about prelegal education or who are interested in learning about other law schools may find the Prelaw Handbook useful. The Prelare Handbook, which is published annually by the Association of American Law Schools and the Law School

Admission Council, contains descriptions of most law schools in the United States, suggestions about preparation for legal studies, and other helpful prelaw information. The Prelaze Handbook is available from Educational Testing Service, Box 944, Princeton, New Jersey 08540, and in many college and university bookstores.
Applications from Women and from Members of Disadvantaged Groups: The School of Law, which was the host school for the 1972 Northwest Regional Council on Legal Education Opportunity Summer Institute, welcomes applications from persons from economically and culturally disadvantaged backgrounds. It participates with such organizations as the Council on Legal Education Opportunity and the American Indian Law Center to increase representation of persons from disadvantaged backgrounds in law school and in the legal profession. Moreover, the Oregon State Bar Affirmative Action Program works through the three law schools in Oregon toward the goal of increasing the number of minority lawyers in private practice in the state of Oregon. Conditional loan assistance is available to minority law students through this program; the loan obligation will be waived when the recipient takes the Oregon State Bar examination. Approximately seven per cent of the first-year students entering the School of Law in the fall of 1977 were from economically and culturally disadvantaged backgrounds. For further information, direct inquiries to the School of Law Office of Admissions.

The School of Law also encourages applications from women. Approximately 32 per cent of the first-year students entering the School of Law in the fall of 1977 were women.
Facilities for the Handicapped: The Law Center building was designed to ease problems of access to and use of its facilities by handicapped persons. Special parking spaces adjacent to the building may be arranged and an elevator and ramp facilitate both inside and outside access. Arrangements may be made for special study areas for blind students and similar provisions will be made as they become necessary for other handicapped students admited to the School of Law.
Admissions Correspondence: Specific inquiries, applications, fees, Law School Data Assembly Service reports, transcripts, and all supporting documents should be forwarded to the SChool of Law, University of Oregon, Eugene, Oregon 97403 . Unless the applicant
specifies the school of Law, documents may be sent to the central University Admissions Office, seriously delaying action on the application.

## Basic Admission Requirements:

Except in rare cases, applicants must have a baccalaureate degree from an accredited college or university prior to enrolling in the School of Law. Because of the large volume of applications for admission to the School of Law in recent years-approximately 1,100 students applied for the 175 openings in the fall of 1977 -and because of enrollment restrictions, only those applicants who, in terms of their overall records, appear to be most qualified for legal studies can be admitted. Although the admissions requirements of the School of Law are flexible and factors such as grade trends, quality of undergraduate education, military and work experience, maturity, extracurricular activities, personal statements, and letters of reference are considered, experience indicates that it is extremely unlikely that a candidate with a score of less than 600 on the Law School Admission Test and an undergraduate grade average of less than 3.00 on a four-point scale will have a reasonable chance for admission, unless one of these two figures is sufficiently high to compensate for the other. For students in the first-year class entering the School of Law in the fall of 1977, the average undergraduate grade-point-average was approximately 3.40 and the average Law School Admission Test score was approximately 640 . Since the number of students who can be accepted is limited, admissions are competitive, and the fact that an applicant may meet the above standards is no guarantee of admission.

Some preference is given to Oregon residents. This means that somewhat stronger prelegal credentials are generally required of nonresidents than of residents.

Application: Applications and supporting documents should be filed with the School of Law after September 1 of the academic year preceding that for which admission is sought. The Committee on Admissions begins acting on completed applications during December and January, although most applicants are not notified of a decision until after March 1. If an application is complete by February 1 (including receipt by the School of Law of a Law School Data Assembly Service Report and any other supporting documents), the School of Law will make every effort to notify the
applicant of an initial decision by March 25. Applications, together with all supporting documents, should be filed with the School of Law no later than March 15 in order to be considered.
Application Fee: An application from an applicant who previously has registered as a student at the University of Oregon must be accompanied by a check for $\$ 20.00$ payable to the University of Oregon. Applications from all other applicants must be accompanied by a check for $\$ 30.00$ payable to the University of Oregon. An applicant who has been admitted previously but did not register at the School of Law must submit an application fee with the reapplication. This fee is neither refunded nor credited toward tuition and fees, regardless of the disposition of the application.
Law School Admission Test: Applicants must take the Law School Admission Test and have an official report of the test scores sent to the School of Law through the Law School Data Assembly Service. Inquiries concerning the dates, places, and fee for the Law School Admission Test should be sent directly to Educational Testing Service, Box 944, Princeton, New Jersey 08540. The Committee on Admissions will not act on an application until the official report of the test scores has been received.

Applicants who have not previously taken the Law School Admission Test should plan to take it in July, October, or December of the year preceding that for which admission is sought. In any event, an applicant must take the test no later than February of the academic year preceding that for which admission is sought in order to receive consideration for admission. Law School Admission Test results are normally considered current for a period of five years and, as a general rule, the School of Law averages all attempts on the test.
Lazw School Data Assembly ServiceTranscripts: The Committee on Admissions cannot act on an application until transcripts are furnished to the School of Law showing academic work completed at each undergraduate, graduate, or professional school attended. In order for an applicant to be considered for admission, these transcripts must show completion of at least three years of undergraduate work.

The School of Law participates in the Law School Data Assembly Service. Transcripts should be sent to the Laze School Data Assembly Service for forwarding and not mailed directly to
the School of Lazu. For further information concerning the Law School Data Assembly Service, applicants should direct inquiries to the Educational Testing Service, Box 944, Princeton, New Jersey 08540.
Unsuccessful applicants who have applied for admission to the School of Law in prior years must have a new Law School Data Assembly Service report forwarded to the School of Law at the time of reapplication, even though prior applications may have been accompanied by transcripts or earlier Law School Data Assembly Service reports.
Transcripts forwarded to the School of Law by the Law School Data Assembly Service are not official. Therefore, after receiving notice of admission, applicants must submit to the School of Law official transcripts showing receipt of a baccalaureate degree before they will be permitted to enroll.
If the applicant is currently enrolled in an undergraduate school, favorable action by the Committee on Admissions will be a conditional admission. Final admission cannot be granted until transcripts are furnished to the Committee on Admissions showing that a baccalaureate degree has been conferred.
References: Applicants are not required to submit letters of reference. Further, because of the large volume of applications received by the School of Law, the Committee on Admissions normally does not communicate with the references listed on an application. Therefore, if an applicant believes it is important that reference letters be considered by the Committee on Admissions, he or she should have them sent directly to the School of Law. The School of Law has developed a standard reference form, and strongly encourages applicants to provide each writer with a copy of this form at the time a letter of reference is requested. In the past, the Committee on Admissions has generally found letters from faculty members to be of greater assistance in evaluating an applicant than those from other sources.
Personal Interviews; Personal Statements: Although members of the law faculty, and the Admissions Officer, are willing to discuss legal education at the School of Law with prospective applicants, personal interviews are neither required nor encouraged as part of the admission process. In lieu of personal interviews, applicants are invited to submit personal statements with their aplications for admission.

Admission Acceptance Fee: Applicants who are offered admission to the School of Law are required to pay an Admission Acceptance Fee of $\$ 100$ in order to reserve a space in the entering class. This fee normally must be paid by April 1 or within approximately two weeks after a notice of admission is mailed, whichever date is later. Although the Admission Acceptance Fee is not credited toward the tuition and fees of enrolling students, applicants who withdraw before registering may receive a partial refund of the fee. For further information concerning the refund schedule for this fee, please consult the School of Law Office of Admissions. A limited number of students who enroll in the School of Law may receive waivers of the Admission Acceptance Fee on the basis of financial need.

Validity of Admission: An admission to the School of Law is valid only for the fall semester stated in the notice of admission. An admitted applicant, except an applicant who is prevented from registering because of required military or alternative service, who does not register in the School of Law for that semester must reapply by filing a formal application to be admitted for a subsequent fall semester. A student who reapplies is considered with other students who are applying for the subsequent fall semester, so that admission for a prior year does not assure admission for a subsequent year.

An admitted applicant who is prevented, because of required military or alternative service, from registering in the fall semester stated in the notice of admission will be readmitted without being considered with other students who are applying in a subsequent year, provided (1) the applicant notifies the School of Law, prior to the time of registration for the fall semester stated in the notice of admission, of such required military or alternative service and furnishes documents or other evidence substantiating the requirement of service; (2) the applicant seeks readmission at the earliest possible opportunity after completion of the period of required service; and, (3) the applicant files a formal application for readmission and, where applicable, furnishes transcripts of any undergraduate, graduate, or professional school courses taken during the period of required service.

Time of Enrollment: First-year students may begin studies at the School of Law only at the beginning of the fall semester of each academic year. No
part-time program is offered by the School. of Law.

## Photographs: University of Oregon

 Student Identification cards include a photograph which is taken at the time that a student initially registers for classes. Applicants to the School of Law are not required to submit a photograph at the time of application but, in the case of students who are admitted and register, duplicates of the photographs taken for Student Identification cards will be retained as a part of the records of the School of Law.Previous Law School Study: An applicant who has attended another law school must have the dean of that law school send a letter to the Committee on Admissions stating that the applicant is in good standing and eligible to return to that school without condition. This statement is required before the Committee on Admissions will act on the application even though the applicant does not seek advanced standing.

Transfer Applicants and Visiting Students: An applicant may transfer, except in unusual cases, no more than one year of credit earned in another law school of recognized standing. The right to reject any and all such credit is reserved.
Applicants who have attended another law school and who seek to transfer credit from that law school to the School of Law will not be admitted unless: (1) the school from which transfer is sought is on the list of schools approved by the American Bar Association and is a member of the Association of American Law Schools; or, in exceptional cases, the school from which transfer is sought is approved or provisionally approved by the American Bar Association only, or is a foreign institution providing legal education in courses substantially equivalent to those offered by the University of Oregon School of Law and whose admission standards are comparable to those of the School of Law; (2) the applicant is eligible to return in good standing to the school previously attended; (3) the applicant's progress toward the degree is satisfactory to the School of Law; and (4) the applicant's law school record is of high quality.

Students who have attended another law school for more than one year may be accepted to attend the School of Law as visiting students. Visiting students are not eligible for degrees from the University of Oregon.

Applicants who have attended another law school for more than one year will be considered for admission as visiting students if (1) the school in which the application is currently enrolled is on the list of schools approved by the American Bar Association and is a member of the Association of American Law Schools; or, in exceptional cases, is approved or provisionally approved by the American Bar Association only, or is a foreign institution providing legal education in courses substantially equivalent to those offered by the University of Oregon School of Law and whose admission standards are comparable to those of the School of Law; (2) the applicant is eligible to return in good standing to the law school previously attended ; (3) the applicant's previous legal education demonstrates a high quality of academic achievement and/or such education plus the applicant's background demonstrates that he or she would make a substantial contribution to the academic environment of the School of Law.

Enrollment restrictions limit the total number of spaces available in the School of Law and priority is given to students seeking admission to the entering class over transfer applicants and visiting students. As a general rule, few transfer students and visiting students are admitted.

The Committee on Admissions can not act on an application from a transfer applicant or a visiting student until transcripts showing all work undertaken at previous law schools are filed with the committee. Transfer applicants and visiting students are not required to forward transcripts to the School of Law through the Law School Data Assembly Service. Two transcripts of prelegal coursework at each undergraduate, graduate, or professional school attended and two transcripts of all law school courses completed should be sent directly to the SCHOOL OF LAW, University of Oregon, Eugene, Oregon 97403. In addition, transfer applicants and visiting students should have Law School Admission Test scores forwarded to the School of Law by the Educational Testing Service. Transfer applicants and visiting students should file applications by June 1 preceding the academic year for which admission is sought in order to be considered.

## Health Requirements for Admission:

 All students are required to complete a health history form and to present records of a tuberculin test and diphtheria-tetanus immunization.
## Costs and Student Financial Aid

Law students who hold a baccalaureate degree from an accredited college or university are classified as graduate students. Regular fees are payable in full at the time of registration. Payment of the stipulated fees entitles all students enrolled for academic credit to all services maintained by the University for the benefit of students. These services include use of the University Library; use of laboratory and course equipment and materials in connection with courses for which the student is registered; medical attention at the Student Health Center; use of gymnasium equipment (including gymnasium suits and laundry service) ; a subscription to the student newspaper, The Oregon Daily Emerald; admission to concert and lecture series sponsored by the University. No reduction in fees is made to students who may not want to use these services.

Tuition and Fees: For the 1978-79 academic year, tuition for resident students is $\$ 1,507$, and $\$ 1,831$ for nonresident students. In addition, there is an annual general deposit fee of $\$ 25.00$ against breakage or loss of University property. Tuition and fee schedules are subject to revision by the State Board of Higher Education.

The State Board of Higher Education defines a nonresident student as one whose official record shows a domicile outside Oregon. Students who have domiciles independent of parents or guardians and receive no financial support from them may qualify as a resident if evidence is presented that the students established domiciles in Oregon six months prior to first registration in any institution of higher learning in the state of Oregon. The details of the rules governing administration of nonresident and resident policies are complex; students are advised to consult the University's Office of Admissions for answers to individual questions.

Fee Refunds: In the event of complete withdrawal from the School of Law or a reduction in course load, refunds may be granted to students in accordance with the refund schedule on file at the University of Oregon Business Office. All refunds are subject to the following regulations:
(1) Withdrawal or course reduction does not automatically result in a refund. Any claim for refund must be written within the current term but no later than the close of the following term.
(2) Refunds in all cases are calculated from the date that the student officially withdraws from the University, not from the date when the student ceased attending classes, except in unusual cases when formal withdrawal has been delayed through causes largely beyond the control of the student.
(3) No refunds will be made for any amount less than $\$ 1.00$.
(4) Refunds of incidental fees are subject to return of Certificate of Registration.

Please see also the information concerning refund of the School of Law Admission Acceptance Fee.
Tuition Refund Schedule: For complete withdrawal or course load reduction before classes begin, the refund is 100 per cent; for complete withdrawal or reduction of course load before close of first week, refund is 90 per cent ; for complete withdrawal or reduction of course load before close of second week, refund is 75 per cent ; for complete withdrawal before close of fourth week, refund is 50 per cent; for complete withdrawal before close of sixth week, refund is 25 per cent.

There is no refund for complete withdrawal after the close of the sixth week ; there is no refund for course load reduction after the close of the second week. Approximately six weeks should be allowed for processing tuition refunds.
Deposits and Application Fee: All persons who enroll for academic credit (except staff members) must make a deposit of $\$ 25.00$ payable once each year. This is required to protect the University against loss or damage of institutional property, library books, and against failure to pay promptly nominal fines and assessments such as library fines, campus traffic fines, and Student Health Center charges. If at any time charges against this deposit become excessive, the student may be called upon to re-establish the original amount.

The $\$ 25.00$ general deposit, less any deductions which may have been made, is refundable within the term following the term of withdrawal, if a request is made in writing to the Business Office. Otherwise an automatic refund is made during the summer following the close of the academic year.

The School of Law application fee is $\$ 30.00$. The Admission Acceptance Fee is $\$ 100.00$.
Deferred Tuition: Law students who do not have any delinquent University of Oregon accounts and who experience
difficulty in meeting payment of tuition and fees at the time of registration may apply for a Deferred Tuition Loan in the amount of three-fourths of academic tuition and fees. Excluded from the deferred tuition plan are board and room, family housing, fines, penalties, program changes, deposits, and other special charges.
Total Costs: Because student living arrangements and personal spending habits vary widely, there is no single figure that represents the cost of attendance at the University of Oregon. However, it may be estimated that total 1978-79 a ademic costs for a single student at the School of Law will average approximately $\$ 4,200.00$ (tuition, fees, books, board and room) ; for a married student, costs are likely to be around $\$ 6,000.00$, and more if one has children.

Health insurance is optional. The cost by semester or for a full twelvemonth coverage may be obtained from the University Business Office. Coverage for dependents of students is also available. Personal expenses are governed by individual preference but may include such items as car insurance, maintenance, and operation; an optional University parking permit of $\$ 5.00-\$ 15.00$ a year ; a mandatory $\$ 2.00$ city bicycle license; vacation and weekend travel; theater, movie, and athletic tickets, and other entertainment ; such incidentals as laundry, toilet articles, gifts, and dining out.
Student Aid Funds: Limited assistance is available through emergency loans to help students meet short-term University-related expenses for a period of not more than ninety days. The maximum assistance is $\$ 100.00$. Inquiries concerning emergency shortterm loans should be directed to the Office of Student Financial Aid, 270 Oregon Hall, Eugene, Oregon 97403.
National Direct Student Loans: Under the National Defense Education Act of 1958, long-term postgraduate repayment loans are available to qualified students. The amount of the award is determined by individual need, but will not exceed $\$ 2,250$ for an academic year. Repayment begins ten months after termination of full-time enrollment. Three per cent interest is charged.
Guaranteed Student Loans: Oregon resident law students who are enrolled at least half time may apply for a bank loan guaranteed by the Oregon State Scholarship Commission up to a maximum of $\$ 2,500.00$ per semester. Oregon lenders, however, vary in their
individual loan limitations. Students who qualify for a federal interest subsidy are not charged interest during the time they are enrolled at least half time, plus a grace period of nine months. The federal interest subsidy is available to students whose adjusted family income is under $\$ 25,000$. Seven per cent simple interest is charged on the balance of the principal after the repayment period begins. A processing fee of one per cent is charged at the time the loan is secured and also at the time of extension or repayment. A nonresident student may apply for a guaranteed student loan through his or her home state loan guaranty agency or, if no state program exists, for a Federally Insured Student Loan. Federal regulations for the Guaranteed Student Loan program limit the loans for law students to $\$ 5,000$ per academic year, $\$ 7,500$ aggregate for undergraduates. This aggregate may be increased to $\$ 15,000$ if the borrower is in a graduate program. Repayment is in monthly installments of not less than $\$ 30.00$ and will be greater if more than $\$ 2,585$ has been borrowed. The term of the repayment may not exceed 120 months although adjustments may be made for some types of deferments.

Financial Aid Inquiries and Applications: Inquiries about and applications for financial assistance through loans and the College Work-Study Program should be directed to the University of Oregon Office of Student Financial Aid, Eugene, Oregon 97403. Applicants who may need financial aid should submit completed applications to the Office of Financial Aid even though they have not been informed of a decision on their application for admission to the School of Law, because financial aid cannot easily be obtained after the academic year begins.
College Work-Study Program: Parttime employment is available to eligible students through the College WorkStudy Program. Eligibility is based on financial need. Under this program, students may work a maximum of 15 hours per week while enrolled as full-time students.
Student Employment: Many students earn a large part of their expenses by work in the summers and during the academic year. The University offers assistance to those seeking part-time and vacation jobs through its Student Employment Service; most employment opportunities depend upon personal interviews after the student arrives on campus. Please see, also, School of Law Placement Service.

## Scholarships and Fellowships

When funds are available, limited stipends are granted to advanced law students to support research on particular projects.
Lois I. Baker Scholarship: The Lois I. Baker scholarship is awarded to a second-year student in the School of Law on the basis of financial need and academic achievement. The award consists of the income of a fund established by friends and former students in honor of Lois I. Baker's long service as Law Librarian of the School of Law and her many personal contributions to the lives and education of several generations of law students.
James D. Barnett Scholarships: One or more scholarships are awarded annually by the faculty of the School of Law to needy and worthy students. The scholarships are supported through the income of an endowment fund, established by Mrs. Winifred Barnett Allendoerfer and Professor Carl Allendoerfer, in memory of Dr. James D. Barnett, member of the University faculty from 1908 until his death in 1957.

William Westfall Bartle Memorial
Fund: One or more scholarships are awarded annually to needy and worthy law students. The scholarships are financed from a fund established by his family and friends in memory of Judge William Westfall Bartle, a 1932 graduate of the University of Oregon School of Law.
Henry E. Collier Law Scholarships: Several scholarships are awarded annually on the basis of financial need and good moral character to worthy students in the School of Law who intend to make the practice of law their life work. No recipient may be awarded more than $\$ 500$ in any one year. The scholarships are supported by the income of a $\$ 50,000$ trust fund established under the will of the late Henry E. Collier, Portland attorney.

Lorienne Conlee Fowler Law Scholarship: The Lorienne Conlee Fowler Scholarship is awarded on the basis of need and scholastic record to a student in the School of Law. The award consists of the income of a $\$ 5,000$ trust fund established by Dr. Frank E. Fowler, in memory of his wife, Mrs. Lorienne Conlee Fowler.
Herbert B. Galton Scholarship: A $\$ 300$ scholarship and a $\$ 150$ scholarship, for use during the third year in the School of Law, are provided annually by Herbert B. Galton, a Portland attorney and
a member of the Class of 1938 , to be awarded on the basis of interest in the field of labor law or problems of employed persons, as demonstrated by course work and writings of publishable quality.
Charles G. Howard Law Scholarships: Several scholarships of varying amounts are awarded annually to students in the School of Law on the basis of satisfactory academic progress, financial need, and the applicant's effort to solve his or her own financial problems. The scholarships are supported through a trust fund established by members of Phi Alpha Delta legal fraternity and are named in honor of the late Charles G. Howard, professor emeritus of law, and a member of the faculty of the School of Law from 1928 to 1971.
Jackson Scholarship: The trustees of the Jackson Foundation, a trust established by the late Maria C. Jackson, widow of C. S. Jackson, the founder of the Oregon Journal, offer annually a substantial scholarship to a needy law student of high ability who is a graduate of a secondary school in Oregon. Other things being equal, preference is given to a son or daughter of any present or former employee of the Oregon Journal. The recipient is nominated by the School of Law faculty.
James T. Landye Scholarships: One or more scholarships are awarded annually by the faculty of the School of Law to scholastically superior students who are in need of financial assistance. The scholarships are financed through the income from a fund contributed by the friends of the late James T. Landye, a Portland lawyer and a member of the Class of 1934.
Law School Alumni Scholarships: Several scholarships are awarded by the Law School Alumni Association to members of the entering class of the School of Law on the basis of financial need and prelegal academic achievement. The latter criterion requires an outstanding prelegal academic record based on information available to the Committee on Admissions at the time of conditional or final admission. The recipients of these scholarships are selected by the president of the association and the dean of the school.
Applicants eligible for consideration for one of these scholarships will be provided an application form with their conditional or final notice of admission to the School of Law.
Oregon State Bar Conditional Loans: The Oregon State Bar Affirmative Action Program is funded through
assessments from each active member of the Oregon State Bar Association. The program works through the three law schools in Oregon toward the goal of increasing the number of minority lawyers in private practice in Oregon. Conditional loan assistance is available to minority students through this program. The loan obligation is waived when the recipient takes the Oregon State Bar Examination.
Kathryn Fenning Owens Memorial Fund: One or more scholarships are awarded annually by the School of Law to superior students who are in need of financial assistance. The scholarships are financed from a fund established by the parents of Kathryn Fenning Owens, whose untimely death occurred shortly before she was to enroll in the School of Law.
Paul Patterson Memorial Fellowship: A fellowship of approximately $\$ 1,000$ is awarded annually to a student completing the second year in the School of Law who best exemplifies the high qualities of integrity, leadership, and dedication to public service which characterized the late governor of Oregon, Paul L. Patterson, Class of 1926. The fellowship is financed from the income of a fund supported by gifts in his honor from friends and relatives of Paul Patterson.
School of Law Scholarships: Several scholarships of varying amounts are awarded annually by the School of Law to students who demonstrate academic achievement and financial need. The scholarships are financed through gifts from alumni and friends of the School of Law.

Lane County Lazyers' Auxiliary Association Emergency Loan Fund: A fund has been established by gifts from the Lane County Lawyers' Auxiliary Association and is administered by the School of Law to provide short-term loans to students who encounter unforeseen, emergency expenses during a period of enrollment in the School of Law. The amount of loan assistance available is limited.

Academic Calendar for Students of Law

The School of Law operates under an early semester calendar. Under this calendar, registration for fall semester takes place in late August, fall semester examinations are given before Christmas vacation, and the spring semester ends in mid-May. For additional information concerning calendar dates, please consult the School of Law.

## Courses of Instruction

## General Education Courses

L 430. Law, Its Processes and Functions.
(g) 3 credit hours. An introduction to the legal system offered for nonlaw students. Law is presented not as a body of rules but as a humanistic and liberal subject. Various sources, both legal and nonlegal, are used to demonstrate how the legal system operates and what its main social functions are. The course does not focus on any particular subject matter, but presents an overview of the legal system with an emphasis upon those features common throughout the system.

## L 504. Law Courses for Nonlaw Students.

 Credit hours to be determined. An openended course number under which semester credit is converted to term credit on the transcripts of nonlaw students who receive permission to take specific School of Law courses ( 500 series) on a semester basis.
## Required First-Year Courses

L 511, 512. Contracts. 3 credit hours each semester, fall and spring. The formation of contracts; consideration and other formalities ; performance and breach; excuse from performance; contract remedies ; contract interpretation ; assignment and delegation; third-party beneficiary contracts; sales of goods under Article 2 of the Uniform Commercial Code.

## L 513, 514. Torts. 3 credit hours fall

 semester, 2 credit hours spring semester. Liability for intentional and negligently caused injuries to person and property; strict liability ; vicarious liability ; ultra-hazardous activities; nuisance; invasion of privacy; defenses and immunities; the impact of insurance and risk distribution upon liability ; accident compensation plans; damages, including economic losses.L 515. Civil Procedure. 4 credit hours fall semester. A survey of state and federal court organization and jurisdiction and of systems of civil procedure, intended to identify the goals and methods of litigation to enhance comprehension of substantive law, and to provide a foundation for advanced procedure courses.

## L 516. Legislative and Administrative

 Processes. 3 credit hours fall semester. An introduction to the nature of and distinctions between the development and the application of law ; the interrelationship of legislative, executive and judicial powers; legislative considerations also may include the committee system, regulation of lobbying, and appropriations; the concept of delegation of authority ; legislative and administrative processes in adjudicated cases as opposed to the managerial execution of governmental policy.L 517. Property. 4 credit hours spring semester. An introduction to the nature and function of private property rights. Subjects covered may include the common law classification of estates in land; forms of concurrent ownership; landlord and tenant; transfers of interests in real property, including legal descriptions, conveyancing, and recording systems; adverse possession ; incorporeal interests in land, easements, covenants, and servitudes ; title insurance.

## L 518. Criminal Law and Procedure. 4

 credit hours spring semester. The administration of criminal law as a technique of social order, with primary emphasis on constitu-tional, statutory, and other limitations on criminal law enforcement ; the definition of crimes, with primary emphasis on the sources of definitions, the elements of specific crimes, the limitations on culpability, and the resulting impact of these factors on criminal law enforcement.
L 519. Legal Research and Writing. 2 credit hours fall semester. Students undertake writing projects prepared and supervised by members of the faculty. They receive instruction both in legal research and in specific forms of legal writing, such as the drafting of statutes, the preparation of inter-office memoranda, and the writing of judicial opinions. Offered in small sections.

## L 520, 521. Legal Perspectives. 1 credit

 hour each semester, fall and spring. Legal Perspectives offers first-year students an opportunity to study the influences that other groups and other disciplines have upon the law and upon lawyers. The course focuses on the demands for an effective legal services delivery system ; the influences that lawyers as a professional class have upon the values embodied in the law; and the actual benefits and services which the law delivers.
## Second-Year and Third-Year Courses

## Note: All second-and third-year courses are

 elective except $L 549$, which is required. Most of the courses and seminars listed below are offered during every academic year. Every effort is made to offer all of the follozeing courses and seminars at least once every two years, but the ability of the SChool of Laze to offer some courses and seminars may be limited by student interest and faculty resources.L 535. Secured Land Transactions. 3 credit hours. An analysis and comparison of such land financing devices as mortgages, trust deeds, and land sale contracts; default and remedies ; the development of the conceptual and functional aspects of secured land transactions in the context of such modern land development devices as land subdivisions and shopping centers.

## L 536. Commercial Law. 4 credit hours.

The study of commercial and consumer transactions, focusing primarily on the use of negotiable instruments, and personal property security interests in these transactions; coverage of Articles $3,4,6$, and 9 of the Uniform Commercial Code, as well as related provisions of the federal Bankruptcy Act.

## L 537. Trusts and Estates I. 3 credit hours.

 Intestate succession ; execution and construction of wills; creation of trusts; fiduciary administration of decedents' estates and trusts.L 538.Trusts and Estates II. 2 credit hours. An examination of the validity and effect of gratuitous dispositions of assets in which enjoyment is postponed or restricted; questions and rules of construction affecting dispositive language; powers of appointment ; the rule against perpetuities and related restrictions. Prerequisite: L 537.

## L 541. Partnerships and Corporations.

 4 credit hours. A comparative study of partnerships, corporations, and other business associations; launching the enterprise and transactions prior to formation: management, control, and transfer of control in a going concern; managers' benefits and risks; asset distributions to members; reorganization of a solvent enterprise; solvent dissolution.L 543, 544. Constitutional Law. 3 or 4 credit hours each semester. Offered in two sec-
tions: L 543 is a survey course carrying four credit hours in one semester ; L 543,544 is a six-credit hour sequence, carrying three credit hours for two semesters, for students who want an intensive study of constitutional law. L. 543 includes : the Federal System under the Constitution of the United States : the allocation of power between the federal and the state and local governments, and the separation of power among the three branches of the federal government, with emphasis on judicial review in constitutional cases; individual liberties under the Constitutions of the United States and of the States: Due Process, Equal Protection, Free Speech, Freedom of Religion, and other guarantees. Not open to students who have completed one semester or two semesters of L 543, 544.
L 543, 544 includes: the Federal System under the Constitution of the United States ; judicial review in constitutional cases ; national and state control of the economy under the Commerce Clause ; the powers to tax and spend and other powers of Congress ; national power in international relations ; the separation of powers between the Congress and the President; guarantees of individual liberty through limitations on governmental power and by the exercise of federal authority over the States; constitutional issues in state courts. Not open to students who have completed the single semester course L 543 .
L 545. Oregon Practice and Procedure. 3 credit hours. An intensive study of civil procedure in Oregon state courts; a comparison of Oregon civil procedure with the Federal Rules of Civil Procedure ; a critical evaluation of Oregon civil procedure in light of the purposes and values of a procedural system.
L 546. Federal Courts. 3 credit hours. A study of the role of the federal courts in the operation of the Federal System; analysis of the constitutional and legislative foundations of the judicial power of the United States; jurisdiction : diversity of citizenship, federal question, jurisdictional amount, and removal ; venue; federal and state court relationships ; the law applied by the federal courts; procedure in the federal district courts; appellate jurisdiction and procedure in the courts of appeals ; appellate jurisdiction and procedure in the Supreme Court of the United States.

## L 547. Conflict of Laws. 3 credit hours.

Theories of prediction and decision in cases involving more than one state or nation; jurisdiction; foreign judgments ; choice of governing law in such fields as torts, contracts, sales, security transactions, probate, business organizations, property law, and family law; federal-state choice of law problems.
L 548. Creditors Rights. 3 credit hours. Remedies of and priorities between unsecured ereditors ; fraudulent conveyances; validity of security interests ; exemptions; protection of debtors against wrongful or oppressive collection methods; bankruptcy.

## L 549. Legal Profession. 2 credit hours.

 A study of the Code of Professional Responsibility; the roles and functions of lawyers in society; the organization and functions of the bar; provision of legal service ; responsibilities involved in representing clients; the future of the legal profession. Students may participate in a legal resources information service. Classroom work may include the review and analysis of videotaped ethical problems. A required course.
## L 551. Evidence. 3 or 4 credit hours.

Offered in two sections: a three-credit hour survey course and a four-credit hour course for students expecting to engage in substantial
courtroom practice. Both courses will cover the following: the development of an understanding of the law of evidence adequate, and necessary, for counseling purposes; structure of the adversary system; roles of the judge, the jury, and the attorney in the fact-finding process; sufficiency of evidence; order of proof ; presumptions; relevancy ; judicial notice ; real and documentary evidence; form and elicitation of oral testimony ; impeachment and rehabilitation of witnesses ; the hearsay rule and its exceptions; privelege. The four-hour course will in addition provide intensive treatment of the practical problems in the introduction of evidence and of trial tactics and methods. Courtroom observations, movies, and videotapes of effective trial techniques will be used as models for study and critique. In addition, audio and videotape materials will be employed to involve members of the class in realistic trial situations. Audio and videotape materials also will be used in the three-hour course, although not to the same extent. Neither course is open to students who have taken the other course.
L 554. Insurance. 2 credit hours. The insurance business; insurable interest; interpretation of insurance contracts; coverage of the contract as to the event and the insured property and liability insurance; subrogation; warranties; representation and concealment.
L 555. Family Law. 2 credit hours. The nature of marriage and the dissolution of marriage; the status of the husband, the wife, and the child; procreation and nonprocreation ; illegitimacy; adoption; support obligations; the rights of men, women, and minors in the areas of privacy.
L 556. Legislation. 2 credit hours. Statutory drafting; canons of construction; modes of interpretation; legislative history and its uses; the committee process; chamber rules; a comparison of the roles of the courts and the legislatures; public access to the legislative process.
L 557. State and Local Taxation. 2 credit hours. A study of the major issues arising under the principal forms of state and local taxation; corporate franchise and income taxation (with emphasis on problems of apportionment), property, personal income, sales and use, and death taxes; federal and state constitutional limitations; congressional legislation affecting state taxation of interstate commerce; the Multi-State Tax Compact ; an examination of the Oregon tax system (and California sales and use tax), or an alternative system, by each student.
L 557. Local Government Law. 2 credit hours. The nature, constitution, powers, and liabilities of municipal corporations, and the interrelationships between municipal and county government and state government.
L 559. Labor Law I. 3 credit hours. An analysis of the National Labor Relations Act and the Oregon Labor Relations Act; the right of self-or ganization; selection of the representative by election and by other means ; unit determination ; bargaining in good faith ; remedies for unfair labor practices; judicial review; strikes, boycotts, and lockouts under the various labor relations acts; concerted activities ; the roles of the courts and the labor agencies.
L 560. Labor Law II. 3 credit hours. A study of public-employee bargaining under local and state law, and under federal executive order ; race and sex discrimination under state law, the Civil Rights Act, federal executive order, and collective bargaining agreements; occupational safety and health legislation; the relationship between the
individual and the union in representation, discipline, and membership matters; individual rights under grievance and arbitration clauses and under judicial review; consideration of the roles of the courts and the agencies and of judicial review.
L 561. Restitution and Equitable Remedies. 3 credit hours. The study of the concept of unjust enrichment as a source of liability in addition to liability based on assent or fault; consideration of equitable remedies, with special emphasis on their utility in areas of unjust enrichment.

## L 562. Jurisprudence. 3 credit hours.

Focuses on the basic issues of the philosophy of law: on theories of justice and the nature of law. Within this framework, more specific issues such as theories of adjudication, the possible limits on the proper use of governmental power such as its use to enforce morality, and the obligation to obey the law are discussed.
L 563. Antitrust Law. 3 credit hours. A survey of the effect of the major federal legislation (the Sherman-Clayton, RobinsonPatman, and Federal Trade Commission Acts) in the antitrust and unfair competition areas. The implications of price-fixing, territorial divisions, resale price maintenance, exclusionary and predatory practices, tying, monopolization, mergers, industrial concentration, and price discrimination are discussed in terms of planning and enforcement, as are judicial interpretations of the broadly worded federal statutes.
L 564. Administrative Law. 3 credit hours. An analysis of judicial review of administrative action, including presumptions, standing, ripeness, exhaustion, and questions of fact and law; the process of proof in adjudicatory hearings, including official notice, evidentiary considerations, and investigation; the process of decision in adjudicatory hearings, including separation of function, bias, and ex parte communication ; procedural distinctions between rule-making and adjudication.
L 565. Securities Regulation. 3 credit hours. The study of the regulation of the distribution of securities under the Securities Act of 1933 and under state blue-sky laws; the regulation of trading insecurities on stock exchanges and over the counter; civil liabilities under federal and state securities laws; the regulation of investment companies. Prerequisite: L 541 .

L 566. Admiralty. 3 credit hours. An introduction to basic maritime law; jurisdiction; maritime liens; carriage of goods by sea; collision; damages; limitation of liability ; injuries and death to seamen and harbor workers ; indemnity ; chartering ; salvage ; general average.
L 567. Copyrights. 3 credit hours. An analysis of the legal problems arising in the production, marketing, and distribution of literary, musical, art, and related works; creation and ownership of copyright interests, types of protected works, and copyright procedure ; copyrighting of computer programs ; protection of applied art; liability of community antenna television systems; use of copyrighted works in classrooms for educational and research purposes.
L 568. Urban Land Use Law. 3 credit hours. A survey of the function operation, and legal impact of public planning and land use control laws, ordinances, and administrative procedures, including basic constitutional law aspects, urban growth control techniques, land banking, transfer of developmental rights, zoning, variances, conditional use permits,
nonconforming uses, official mapping, subdivision regulations, and other land use control devices and techniques.
L 569. Water Resources Law. 3 credit hours. A study of riparian and appropridtion water law systems ; federal power over water resources ; interstate disputes ; transfer of water rights; competing claims; groundwater management.
L 570. International Business Transactions. 3 credit hours. An analysis of the legal problems arising out of international trade; enforcement of foreign judgments; extraterritorial reach of United States antitrust and securities laws; GATT; the European Economic Community; the balance of payments and direct investment ; expropriation; United States taxation of international business activities; double taxation and tax treaties. Not open to students to have completed L 572.
L 571. International Law. 2 or 3 credit hours. The justification for state actions labeled as rules of law; the sources and evidences of a law between states; statehood; treaties; state responsibility and authority ; individuals in transnational situations; international cooperation. Not open to students who have completed L 572.

## L 572. Transnational Legal Problems. 4

 credit hours. The study of national boundaries; the access of aliens to economic opportunities ; the protection of nationals engaged in economic activities abroad; conflict of jurisdictions; international law; adjudication abroad; the transnational reach of national legislation, including antitrust and tax laws; international economic organizations; GATT ; the International Monetary Fund; the European Economic Community. Not open to students who have completed L. 570 or L 571 .L 573. Administration of Criminal Justice. 3 credit hours. Advanced criminal procedure : covers various aspects of criminal procedure and the criminal justice system, including prosecution, defense, the police, the court system and corrections. The primary emphasis of the course may vary at the discretion of the instructor.
L. 574. Regulated Industries. 3 credit hours. The study of federal and state regulation of industry ; the primary focus is upon public utilities, including electricity, gas, telephone, and transportation and upon broadcasting, including radio, television, and cable.
L 575. Legal Writing. 1 credit hours. The preparation, under the supervision of a faculty member, of a legal research and writing project. Satisfies the second-yearlegal writing requirement.
L 576. Environmental Law. 3 credit hours. Introductory survey course. Litigation and other legal tools for intervening in the governmental process in environmental matters, procedural and substantive uses of the $\mathrm{Na}-$ tional Environmental Policy Act, citizen suit and environmental rights statutes; lawyers' approaches to complex scientific and technical issues, and judicial responses, theories, and constitutional issues in environmental law. Recommended as a background for other courses in pollution, ocean, coastal, and public-lands law. Administrative Law and Constitutional Law are highly recommended to be taken concurrently or earlier.

## L 577. Ocean Resources Law. 2 credit

 hours. The study of emerging legal and regulatory systems aimed at insuring the orderly development of the economic potential of the oceans.L 578. Indian Law. 3 credit hours. The study of the statutory, judicial, and administrative material concerning American Indian tribes and individuals; historical development of Federal Indian policy ; treaties; the trust relationship; tribal sovereignty; civil and criminal jurisdiction; natural resources of tribes ; hunting and fishing rights; tribal self-government.

L 580. Federal Income Tax I. 3 credit hours. The study of statutory, judicial, and administrative material concerning individual income taxation, through development of the concepts of income, deductions, credits, tax accounting, income averaging, basis, and capital gains and loses ; includes an overview of the taxation of trusts and estates and of problems of executive compensation, pension and profit-sharing plans.

L 581. Federal Income Tax II. 2 credit hours. The study of the tax treatment of partners and partnerships, corporations, and shareholders. Prerequisite: L 580.

L 582. Estate and Gift Taxes. 2 credit hours. The study of statutory, judicial, and administrative materials dealing with federal estate and gift taxes.

L 583. Estate Planning. 2 credit hours. Problems in estate analysis, planning, and execution, involving individual work in planning and probating an estate from the interview stage to the drafting of such documents as wills, trusts, business disposition and insurance agreements, and tax returns. Prerequisite : L 538 and L 582

## Writing, Research, and Seminars at the Professional Level

L 501. Research. Credit hours to be arranged. Research under the supervision of a faculty member. Not more than 3 credit hours per semester, or a total of 6 credit hours, may be earned. Satisfies the third-year research requirement.

L 503. Thesis. Credit hours to be arranged. Not more than 3 credit hours may be earned.
L 505. Reading and Conference. Credit hours to be arranged.
L 507. Seminar. Credit hours to be arranged. Seminars offered in the following subjects as student interest and other conditions may make instruction feasible:

## American Legal History. The principal

 topics are the transformation of American law which occurred between the Revolutionary and Civil Wars, the rise of legal classicism in the late nineteenth century, and the impact of the modern regulatory state on traditional legal institutions. The major themes examined include the relations of law to politics, of law to the economy, of law to ideology, and of lawyers to other groups in society.Business Planning. Individual work in prob-lem-solving in the business area through the interpretation of corporate, securities, and tax law. Prerequisite: Federal Income Tax II.

Civil Rights Litigation. Focuses on civil rights under constitutional and statutory law and remedies for the violation thereof. Special emphasis is placed on litigation of constitutional claims under 42 U.S.C. § 1983 ; discrimination on the basis of sex or race under Title VII of the Civil Rights Act of 1964 ; and recent interpretations of the constitu-
tional guarantees of equal protection and due process of law.

Coastal Law. Judicial and legislative responses to conflicting uses of coastal resources: tidelands, wetlands, beaches, and shorelands; title to submerged and submer sible lands; federal-state disputes; the federal navigation servitude ; the Rivers and Harbors Act of 1899 (Army Corps of the Engineers dredge-and-fill regulation) ; judicial protection of public rights of access and use and limits on private use of coastal resources: public trust doctrine, implied dedication and customary rights, taking; Federal Water Pollution Control Amendments of 1972 and Army Corps of Engineers "Section 404" Regulations ; Coastal Zone Management Act of 1972 and 1976 Amendments; Washington. Shorelines Management Act of 1973; California Coastal Conservation Act of 1976; Oregon Coastal Zone Management Program.
Consumer Protection. Recent developments in statutes and case law designed to protect consumers in the marketplace, and of traditional remedies available to consumers whose expectations may be frustrated by commercial advertisements and contracts.

Corporate Reorganization. The mutability of shareholders' rights in proceedings not connected with insolvency; valuation under appraisal statutes; systems of relief for financially distressed corporations ; reorganizations under Chapter X and arrangements under Chapter XI of the Bankruptcy Act; valuation and feasibility under reorganization plans ; forces affecting corporate debtequity ratios. Prerequisite: L 541.
Government Contracts. Examines the budgetary and formation processes for government contracts, types of government contracts, public policies affecting performance, and remedies for the breach of government contracts.

Juvenile Law. The administration of juvenile law, with primary emphasis on the constitutional, statutory, and case law perimeters of the system; the definition of jurisdiction with primary emphasis on the source of definitions, the elements of jurisdiction, and the limitations on liability and treatment of juveniles.
Law and Economics. An investigation of the economic foundation of basic legal concepts : concepts of property, contract, tort and negligence, crime, and the corporation ; the role of law in promoting efficient resource allocation; evaluation of the limits and possible biases of an economic approach to the legal system.
Law and Social Science. A survey of literature viewing the legal process and lawmaking from behavioral science perspectives; an introduction to empirical research and data-handling techniques; in-depth review of studies in selected substantive areas ; exposure to planning an empirical study dealing with a legal topic.
Law, Medicine, and Forensic Science. An examination of the interface between law and medicine in criminal and civil litigation, with primary emphasis on medical problems which attorneys encounter in litigation; an examination of problems of proof in cases involving cause of death, wrongful death, negligent injury, worker's compensation, and criminal liability.
Legal Issues in Accounting. The relevance of accounting judgment to legal problems; a survey of the mechanics of accounting and the
questioning of underlying assumptions, principles, and conventions, with the aim of developing skills in interpreting financial statements.
Legal Issues in Higher Education. Federal and state laws which apply to and affect institutions of higher education; faculty and student rights.

Pollution Control Law. Major emphasis is on air and water pollution law ; some coverage of hazardous wastes. Legal questions include state programs and their coordination and conflict with federal laws; balancing of health effects against economic costs; enforcement issues and techniques; proper and improper roles of courts; concept of technology forcing. Context includes common law, Clean Air Act, Clean Water Act, Safe Drinking Water Act, and Resource Conservation and Recovery Act. Administrative Law and Constitutional Law are not prerequisites but are highly recommended.

Public Land Law. The statutory, judicial, and administrative material concerning the management of the federal lands and their timber, range, mineral, water, and recreation resources ; historical development of federal policy ; procedures of relevant federal agencies with emphasis on the Forest Service and the Bureau of Land Management ; taxation and revenue-sharing; multiple use-sustained yield management ; wilderness preservation.
Tax Policy. Proposals for substantive tax reform to achicve greater tax equity, reduce complexity, and neutralize taxation as a major factor in decision-making. Prerequisite : Federal Income Tax II.

Urban Development Problems. Topics vary, but may include such subject as land-banking, transfer of development rights, growthcontrol techniques, and annexation.

L 607. Seminar. Credit hours to be arranged. Seminars and clinics offered in the following subjects as student interest and other conditions may make instruction feasible:

## Advanced Appellate Advocacy. Training

 and participation in oral advocacy and the preparation of appellate briefs.Civil Practice Clinical Program. This program enables law students, under the supervision of an attorney, to represent clients eligible for legal assistance and to develop skills in interviewing, counseling, drafting negotiating, discovery, and litigation ; field experience at the Lane County Legal Aid Service.
Criminal Defense Clinic. Students, under the supervision of an attorney, handle cases of persons eligible for legal assistance through the Lane County Public Defender Office. The clinic is designed to develop advocacy skills in the context of criminal defense representation.

## Criminal Practice Clinical Program-

Prosecution. This clinic provides students with exposure to some aspects of the criminal justice system as a complement to basic classroom sessions. Students engage in field work, under the supervision of attorneys in the offices of a number of local prosecutors, designed to develop competence in trial preparation and ability, and in other prosecutorial functions.

## Criminal Practice Clinical Program-

Corrections. Students assist prison inmates in the preparation and filing of habeas corpus petitions in the United States District Court. The focus of the field work and class sessions in this clinic is on the interviewing and counseling of clients and on the legal problems of the corrections system.

Environmental Law Clinic. Participation in agency proceedings, submission of petitions requesting government action, techniques of legal access to government files, interviewing of experts and clients, interpretation and presentation of environmental data in legal proceedings, and litigation on behalf of clients. Substantial careful written work under close supervision. Potential topics include water use and conservation, wildlife, pesticides, power generation and transmission, pollution control, coastal developments, state and federal agency procedures, and hazardous materials regulation. Administrative Law is
a prerequisite (although it may be taken concurrently). Preference given to students with one or more courses in environmental, pollution, coastal, public land, or water law.
Law Review. Writing, editing, and other activities in the preparation and publication of the Oregon Laze Reviezo.
Legislative Issues Workshop. This workshop is offered during each regular session of the Oregon Legislative Assembly. Students, who are placed as interns with a legislator or a legislative committee, are involved in legal
research and in the preparation of reports pertaining to issues before the legislature.
Moot Court Workshop. National Moot Court Team. International Law Moot Court Team.
Trial Practice Laboratory. The examination and development of courtroom skills in civil and criminal cases; primary emphasis on opening statement, direct examination, crossexamination, objections, closing argument, and voir dire of juries. Each student will conduct weekly examinations in class and a full trial at the end of the class session.


## School <br> of <br> Music

## Faculty

Morrette Rider, D.Ed., Dean, Professor of Music (chamber music, conducting, pedagogy). B.Mus., 1942 ; M.Mus., 1947, Michigan; D.Ed., Columbia, 1955.

Exine Anderson Bailey, M.A., Professor of Music (voice). B.S., Minnesota, 1944 ; M.A., 1945, Professional Diploma, 1951, Columbia.
R. Wayne Bennett, Ph.D., Assistant Professor of Music (wind ensemble, clarinet) ; B.M.E., 1968, Oklahoma State ; M.M., 1969, Ph.D., 1974, North Texas State.

Joan Benson, M.Mus., Assistant Professor of Music (piano, early keyboard instruments). B.Mus., 1950, M.Mus., 1951, Illinois ; Performer's Certificate, 1952, Indiana University.
Peter Bergquist, Ph.D., Professor of Music (music history, theory, bassoon) ; Member, University Woodwind Quintet. B.S., Mannes College of Music, 1958; M.A., 1960, Ph.D., 1964, Columbia.
Leslie T. Breidenthal, A.Mus.Doc., Professor of Music (voice). B.S., 1948, M.A., 1949, Columbia; A.Mus.Doc., Michigan, 1965.
John Brombaugh, M.S., Adjunct Professor of Music (organ construction) ; B.S., 1960, University of Cincinnati; M.S., 1963, Cornell.

Charles Dowd, M.A., Assistant Professor of Music (timpanist, percussion, jazz studies). B.A., San Jose State, 1970 ; M.A., Stanford, 1971.
David E. Gustafson, Adjunct Instructor (piano technology).
John Hamilton, D.M.A., Professor of Music (organ, harpsichord). A.B., in Physics, California at Berkeley, 1946; M.Mus., 1956, D.M.A., 1966, Southern California.
Lois Neurviesinger Harrison, Ed.D., Assistant Professor of Music (music education) ; B.S., 1951, Trenton State College; M.A., 1953, Ed.D., 1974, Columbia.
Derek E. Healey, D.Mus., Associate Professor of Music (composition, music theory) ; B.Mus., University of

Durham, England, 1961 ; D.Mus., University of Toronto, Canada, 1974.
J. Robert Hladky, A.Mus.D., Professor of Music (violoncello, music history) ; Member, University Trio. B.Mus., Oklahoma State, 1950; M.Mus., 1952, A.Mus.Doc., 1959, Eastman School of Music.

Robert I. Hurwitz, Ph.D., Associate Professor of Music (theory history). A.B., Brooklyn, 1961 ; M.Mus., 1965, Ph.D., 1970, Indiana.
Edward W. Kammerer, M.Mus., Assistant Professor of Music (horn, music education) ; Member, University Woodwind Quintet, Faculty Brass Quintet. B.Mus., 1964, M.Mus., 1965, Öregon.

Franciska Koscielny, D.Mus., Assistant Professor of Music (violin, viola) ; Performance certificate, Hochschule fur Musik, Karlsruhe, Germany, 1967 ; M.Mus. (violin), 1977, M.Mus. (viola), 1978, D.Mus., Florida State University, 1978.
Ira D. Lee, M.Mus.Ed., Professor of Music (trombone, music education) ; Director, Brass Choir, High School Music Summer Session; Member, Faculty Brass Quintet. B.Mus.Ed., 1946, M.Mus.Ed., 1947, Colorado.

Gary M. Martin, Ph.D., Professor of Music (music education, music history). B.A., 1961, M.A., 1963, Adams State ; Ph.D., Oregon, 1965.
Lawrence C. Maves, Jr., M.Mus., Associate Professor of Music (violin) ; Director, University Symphony; Member, University Trio. B.Mus., 1954, M.Mus., 1959, Oregon ; Diploma, Juilliard School of Music, 1958.
Sarah Calkins Maxzvell, B.A., Adjunct Professor of Music (harp). B.A., Oregon, 1957.

John C. McManus, M.A., Professor of Music (clarinet, music education) ; Member, University Woodwind
Quintet. B.Mus.Ed., Northwestern, 1943 ; M.A., Columbia, 1950.
James A. Miller, A.Mus.D., Professor of Music (voice). B.A., Goshen, 1952 ; M.Mus., 1956, A.Mus.D., 1963, Michigan. (Director, Center for International Music Education, 1978-79.)

Randall S. Moore, Ph.D., Assistant Professor of Music (music education). B.A., 1963, M.A., 1965, Oregon; Plı.D., 1974, Florida State.
J. Robert Moore, M.Mus., Assistant Professor of Music (oboe, woodwinds, music education) ; member, University Woodwind Quintet. B.Mus.Ed., 1961, M.Mus., 1962, University of Tulsa.

Harold Owen, D.M.A., Professor of Music (composition, music history, musicianship). B.Mus., 1955, M.Mus., 1957, D.M.A., 1972, Southern California.

Gerald D. Poe, D.M.A., Assistant Professor of Music (trumpet, bands) ; B.A., 1964, Western State College ; M.M.Ed., 1965, Florida State ; D.M.A., 1973, Colorado.
H. Royce Saltzman, D.M.A., Associate Dean, Professor of Music (choral music). B.A., Goshen, 1950 ; M.Mus., Northwestern, 1954 ; D.M.A., Southern California, 1964.
Victor Steinhardt, M.A., Associate Professor of Music (piano). B.Mus., Mount St. Mary's 1964 ; M.A., California, Los Angeles, 1967.
Stephen Stone, D.M.A., Assistant Professor, Assistant to the Dean (Field Instructional Services, choral music). B.S., 1949, M.S., 1956, D.M.A., 1971, Oregon.
Marlene Soriano Thal, D.M.A., Assistant Professor of Music (piano, music history ). B.A., 1954, M.L.S., 1962,
M.Mus., 1971, D.M.A., 1978,

Washington.
Richard Trombley, D.M.A., Associate Professor of Music (music history, flute) ; Member, University Woodwind Quintet. B.S., Juilliard School of Music, 1961; M.Mus., Manhattan School of Music, 1962; D.M.A. Stanford, 1977.

Robert M. Trotter, Ph.D., Professor of Music (analysis and criticism, musicianship, pedagogy). B.Mus., Northwestern, 1942 ; M.A., Chicago, 1947 ; Ph.D., Southern California, 1957.

Monte Tubb, M.A., Associate Professor of Music (musicianship, scoring, composition). B.A., Arkansas, 1956 ; M.A., Indiana, 1960.

Paul H. Westlund, D.M.A., Assistant Professor of Music (choral conducting, music education). B.S., 1967, Illinois; M.S., 1971, Wisconsin ; D.M.A., 1976, Illinois.
Neil Wilson, Ph.D., Professor of Music (voice, chamber choir). B.F.A., 1952, M.Mus., 1955, New Mexico ; Ph.D., Indiana, 1967.
Lizabeth Wing, M.M., Assistant Professor of Music (music education) ; B.A., 1969, Luther College ; M.M., 1971, Cincinnati College-Conservatory of Music.
William C. Woods, M.Mus., Professor of Music (piano, music history) ; Member, University Trio. B.Mus., 1948, M.Mus., 1949, Southern California.

## Faculty Emeriti

Francis W. Bittner, M.A., Professor
Emeritus of Music (piano, music theory). B.Mus., 1936, Cincinnati Conservatory of Music ; M.A., 1943, New York; at Oregon since 1946.
Edmund A. Cykler, Ph.D., Professor Emeritus of Music. A.B., California, 1926 ; Ph.D., Charles University, Czechoslovakia, 1928; at Oregon since 1947.

John M. Gustafson, Ph.D., Associate Professor Emeritus of Music (music education). A.B., Augustana, 1947 ; M.Mus., Michigan, 1951 ; Ph.D., Florida State, 1956; at Oregon since 1956.

George Hopkins, B.A., Professor Emeritus of Music (piano). Teachers Cert., Peabody Conservatory, 1918; B.A., Oregon, 1921 ; at Oregon 191923 , and since 1925.
Homer T. Keller, M.Mus., Professor Emeritus of Music (composition, music theory). B.Mus., 1937, M.Mus., 1938, Eastman School of Music ; at Oregon since 1958.
Robert E. Nye, Ph.D., Professor Emeritus of Music (music education). B.Ed., Milwaukee State Teachers College, 1932 ; M.A., 1942, Ph.D., 1949, Wisconsin ; at Oregon since 1950.
Robert S. Vagner, M.Mus., Professor Emeritus of Music (clarinet, music education, director of bands). B.A., 1935, M.A., 1938, Colorado State; M.Mus., Michigan, 1942 ; at Oregon since 1950.
Virginia Johnson Whitfield, Ed.D., Professor Emerita of Music (music education). B.Mus., 1934, M.Mus., 1946, Colorado ; Ed.D., California at Los Angeles, 1962 ; at Oregon since 1965.

A Department of Music was established at the University of Oregon in 1886. The School of Music was organized in 1900, and was admitted to membership in the National Association of Schools of Music in 1928. The standards of the school are in accordance with the standards set by the association.

The primary aims of the school are: to help students prepare for a variety of professions in music; to provide the nonmusic major student with both broad elective music studies which will assist him or her to be aware and appreciative of the growing musical heritage of civilization, and extensive performance opportunities in the studio and in performing organizations.
Facilities: The School of Music is housed in a building complex of five units, two of which are now under construction and slated for completion in 1978. These units include Beall Recital Hall, seating 550 persons; separate band, choir, and orchestra rehearsal rooms with support facilities; more than 65 practice rooms; a small recital hall; studio-offices, classrooms, and seminar rooms. The University Library music collection includes complete critical editions of standard reference works, periodicals, recordings, and a large collection of books and scores. The music collection is supported by gifts from Phi Beta and Mu Phi Epsilon and a bequest from the late Matthew H. Douglass, former University Librarian. Through acquisitions under the Farmington Plan, the Library has a particularly strong and growing collection of contemporary foreign books on music. Seven pipe organs are housed within the School of Music facilities, including the nationally recognized organ by Jūrgen Ahrend of East Friesland, Germany, a concert instrument unique in America, and other tracker organs by Flentrop, Schlicker and Olympic. Two of the four harpsichords available for student use are French doubles by William Dowd. Moog and Putney electronic synthesizers are available to qualified students, and the University owns an extensive collection of orchestral and band instruments and a distinctive collection of ancient and ethnic music instruments.
Music Organizations: The University Singers, the University Chorale, Chamber Choir, Symphonic Wind Ensembles, Marching, Concert and Pep Bands, Symphony Orchestra, Sinfonietta, Brass Choir, Brass Ensemble, Jazz Ensembles, Jazz Lab Band, and Opera Workshop and numerous small chamber ensembles offer membership and performance
opportunities to all qualified students on campus. Collegium Musicum, a vocal-instrumental group, provides opportunity for the study of medieval, Renaissance, and baroque music, using a sizeable collection of reproductions of Renaissance and baroque instruments. The repertory and activities of these organizations are planned to complement courses in analysis, history, and criticism offered by the school.

Public School Teaching: The School of Music offers a program leading to certification as a teacher of music in grades K-12. To be recommended by the University for such Oregon certification, the student must satisfactorily complete the University's approved program for preparing publicschool teachers which includes: (1) subject-matter content for the teaching specialty in music and (2) a professional educational component. The subject-matter content for the norm requirement includes studies in solo and ensemble performance, composing and scoring, music history and theory.
Instruction for General-Campus Students: The following credit-earning ensembles are available for all students, regardless of their major: Marching Band, Pep Band, Symphonic Wind Ensemble, Concert Band, Brass Choir, Symphony Orchestra, Sinfonietta, Opera Workshop, Collegium Musicum, Jazz Ensemble, Jazz Lab Band. Some require auditions; information is available from the School of Music office.

Classes of particular interest to students without previous musical instruction are : Basic Music (Mus 52) ; Introduction to Music and Its Literature (Mus 201, 202, 203) ; Listening with Understanding (Mus 450) ; The Music of Bach and Handel (Mus 451) ; The Classic Symphony and Sonata (Mus 452) ; Introduction to Opera (Mus 453) ; Introduction to Twentieth-Century Music (Mus 454). Frequent special classes of this nature are offered under Mus 199 or G Hum 410, including such topics as Exploring World Music, the History of Jazz and Asiatic and Near Eastern Music.

Students are eligible for instrumental and vocal performance instruction, with extra fee, and for participation in small chamber ensembles. Enrollment is limited ; consent of instructor is required and an audition is prerequisite.
Concerts and Recitals: Frequent concerts and recitals are presented on the campus throughout the year, by visiting artists, members of the faculty
of the School of Music, and advanced music students. Other regularly scheduled concerts include performances by artists of international fame sponsored by the Eugene-University Music Association, the Chamber Concert Series, the Beall Organ Series, and the Eugene Symphony Orchestra.
Center for International Music Education: The School of Music offers a music study program in Europe, centered in Reading, England. The curriculum is open to qualified seniors and graduate students in music. Participants enroll as regular full-time students in the University of Oregon for the current academic year, and must complete requirements for admission as outlined in this catalog. The principal objectives of the center are: (1) to give students a knowledge of music pedagogy in European countries througlı personal observation and participation; (2) to bring each student into the rich stream of European cultural life, both past and present; and (3) to add new perspectives to American musical practices and attitudes. Address inquiries to : Director, Center for International Music Education, School of Music, University of Oregon, Eugene, Oregon 97403.
Financial Aids in Music: Ruth Lorraine Close Musical Fellowship (approximately $\$ 40,000$ awarded annually to some 20 students for advanced study in music, with first preference to those in harp and composition) ; Eugene Women's Choral Society Scholarship (variable amounts for music majors) ; Mu Phi Epsilon Scholarships (variable amounts for currently enrolled music majors) ; Maud Densmore Memorial Sclolarship (variable amounts for upper-division music majors) ; Max Risinger Memorial Scholarship; Musicians Mutual Association Scholarship (variable amounts for Lane County residents majoring in music and studying woodwind, brass or percussion instruments) ; Phi Beta Scholarships (variable amounts for currently enrolled music majors) ; Presser Foundation Scholarships ' $\$ 500$ for an undergraduate music major intending to teach music) ; Paul Clarke Stauffer Scholarship (\$1,000 for a music major, with first consideration to current high-school seniors residing in Eugene, Oregon). For additional details on these financial aids, write to Dean, School of Music, University of Oregon, Eugene, Oregon 97403.

Music Fees: Students who major in music receive studio performance instruction only at the level of MuP

171-194 or above without extra tuition; exceptions are harp and guitar students, who must pay an extra fee. Fees for studio vocal or instrumental instruction for all nommajors are : one half-hour lesson per week, $\$ 50.00$ per term; two half-hour lessons per week $\$ 100.00$ per term. These fees are due at the time of registration each term. Please note : Because of enrollment limitations in some areas of private performance study (notably voice, piano, flute), it may not be possible to provide private instruction to all students immediately upon entrance. Some priority will be given to upper-class majors and early admissions. For those students who cannot be accepted initially, private study for credit, at extra cost, can be provided with nonuniversity faculty as a temporary measure.

All music majors and all harp students, whether majors or not, pay a fee of $\$ 5.00$ per term which entitles them to practice-room privileges. All music students using University-owned instruments pay a fee of $\$ 1.00$ per term per instrument for insurance. The fee for organ or harpsichord practice is $\$ 12.00$ per term for one hour a day; for use of the Moog Synthesizer, $\$ 15.00$ per term for one hour per week individual instruction, $\$ 7.50$ for class instruction.

Students registered for Music Fundamentals and Music Methods in Elementary Teaching pay a laboratory fee of $\$ 2.00$ per term. Those registered for Orientation to Music Education pay a $\$ 3.00$ transportation fee, and students in Techniques classes pay a fee of $\$ 3.00$ instrument rental per term.

## Performance Ensemble Participation

 Requirements: All undergraduate degrees and most graduate degree programs require a specified number of terms of participation in ensemble performance work. The exact requirement will be found under each degree heading. Students will be given an opportunity to express their preference for a specific ensemble. However, assignments will be made in accordance with the needs of the School's ensembles as well as the interests, abilities, and educational needs of the student. A faculty auditioning committee in each performing area is charged with the responsibility of making appropriate assignments and the student and performance instructor will participate with the committee in the decision-making. The auditioning committee will be named each year jointly by the chairmen of the Ensemble Performance Department and Studio Performance Department.
## Undergraduate Studies

(1) Preparation advisable for entering freshmen:
(a) Instruction in voice or on an instrument included in the curriculum, at a performance level sufficient to pass an audition before a panel of faculty members, held prior to initial registration, for entry into MuP 171-194. Information defining the MuP 171-194 level in various performance media is available from the School of Music office. Experience with various styles of music both as performer and as listener, and ability to play a keyboard instrument are valuable for all students, regardless of their primary performance medium.
(b) For vocal students, and students who play woodwind, brass, string or percussion instruments, three years of participation in a large ensemble. For keyboard students, experience in solo performance, in accompanying and in chamber music.
(c) Study of musical notation and terminology sufficient for entry into Mus 121. Information concerning the content of the placement examination is available from the School of Music.
(2) Preparation advisable for two-year college transfers:
(a) College-level instruction in voice, or on an instrument included in the curriculum at a performance level sufficient to pass an audition before a panel of faculty members and held prior to initial registration, for entry into the level of studio performance instruction appropriate for the junior year in the degree program which the student wishes to enter.
(b) For vocal students, and students on a woodwind, brass, string, or percussion instrument, college-level participation in a large ensemble devoted to rehearsing and performing music similar to the program at the University of Oregon. For keyboard students, college-level experience in solo performance, in accompanying, and in chamber music.
(c) College-level proficiency in musical terminology, notation, scoring, composing, analyzing and evaluating music, and aural-visual skills equivalent to those required in Mus 121, 122, 123, Mus 201, 202, 203, Mus 221, 222, 223, Mus 224, 225, 226, at the University of Oregon.

## (3) Admission Procedures:

## Prospective freshmen and transfer

 students who want to major in music must (a) be auditioned in their primary area (voice and instrumental performance, or composition) as a part of theprocess of application for admission to the School of Music. The audition is preferably accomplished in person on the University campus. If this is impossible, a tape recording of the student's performance may be substituted. (A request for audition dates may be made by writing to the School of Music. Four admissions auditions are held between February and May. Applicants who intend to become majors in Composition should submit tape recordings and scores of their original compositions.) (b) take a diagnostic examination in musicianship. A study guide describing cognitive material included in the examination is available from the School of Music.

The diagnostic examination does not require a passing grade for admission but is used to place the student in courses appropriate to his or her background and experience.

Prospective students who are successful in the audition become eligible for admission, subject to available space. Such eligible students are admitted on a first-come-first-served basis.

Enrollment in studio performance instruction is at times governed by available space. Priority for enrollment is defined by (a) the relation of the instruction to a degree objective, and (b) the student's level of advancement as a performer, with continuing students having first priority.

Undergraduate degrees offered by the School of Music are: Bachelor of Arts in Music ; Bachelor of Science in Music ; Bachelor of Music in Performance ; Bachelor of Music in Music Education (Instrumental Option) ; Bachelor of Music in Music Education (Choral-General Option) ; Bachelor of Music in Music Education (Combined Instrumental-Choral Option) ; Bachelor of Music in Music Education with State Handicapped Learner Endorsement; Bachelor of Music in Composition; Bachelor of Music in Music Theory.
(4) Graduation requirements:

Core studies for all degrees are:
(a) Musicianship I and II: Mus 121, 122, 123 and Mus 221, 222, 223 (18 credit hours) ; (b) History of Music, Mus 361, 362, 363 ( 9 credit hours); (c) Analysis: Mus 224, 225, 226 (6 credit hours; (d) Introduction to Music and its Literature : Mus 201, 202, 203 ( 9 credit hours) ; the minimum credit allowed per term for performance studies (studio instruction) for music majors in their primary performance area at the MuP 171 level and above (with the exception of MuP 511-532) is two (2) credits.

Bachelor of Arts in Music requires, in addition to the core studies, the following:
(a) Ensemble performance: 6 terms, appropriately assigned; (b) proficiency in French, German, or Italian as prescribed for all Bachelor of Arts degrees at the University of Oregon; (c) either History of Western Art (ArH 204, 205, 206) or World Literature (Eng 107, 108, 109), 9 credit hours; a senior project in music : either a scholarly work, a performance, or a composition; (d) studio performance: 6 credit hours, including 3 at the level of MuP 171-194 or above. (A maximum of 24 credit hours in studio performance can count toward graduation requirements, of which not nore than 12 credit hours may be taken during the freshman and sophomore years. Students electing a full recital as a senior project must lave a minimum of 18 credit hours at 171 level or above, at least 6 hours of which are to be at 341 level and above, and taken at the University of Oregon.) (e) thirty-six credit hours in Literature and Languages.
Bachelor of Science in Music requires, in addition to the core studies, the following:
(a) Ensemble performance: 6 terms, appropriately assigned; (b) a senior project in music: either a scholarly. work, a performance, or a composition; (c) studio performance: 6 credit hours, including 3 at the level of MuP 171194 or above. (A maximum of 24 credit hours in studio performance can count toward graduation requirements, of which not more than 12 credit hours may be taken during the freshman and sophomore years. Students electing a full recital as a senior project must have a minimum of 18 credit hours at 171 level and above, at least 6 hours of which are to be at the 341 level and above and taken at the University of Oregon.) (d) Thirty-six credit hours in Science or Social Science but not both.

## Bachelor of Music in Performance

 requires, in addition to the core studies, the following:(a) Studio Performance: A minimum of 36 credit hours, including 3 terms at the level of MuP 471-494 and a senior recital; voice majors must have piano proficiency in sight-reading, transposing, and accompanying.
(b) Ensemble Performance: 12 terms, appropriately assigned; piano majors: 6 terms must be in Chamber Ensemble, Mus 194-394.
(c) Voice majors: proficiency in French, German, and Italian equivalent
to that attained either at the completion of two years of college study in one, and one year of college study in another of these, or at the completion of one year of college study in each of the three.
(d) Electives in music courses other than studio performance, performance pedagogy, or ensemble, 5 credit hours.
Bachelor of Music in Music Education, Instrumental Option, requires, in addition to the core studies, the following:
(a) Studio Performance: 18 credit hours on a string, wind, or percussion instrument, including 9 credit hours at the 300 level or above. Must demonstrate piano capability equivalent to completing 3 terms at 071 level or above.
(b) Ensemble Performance: 12 terms, appropriately assigned (woodwind, brass and percussion majors have two terms in Marching Band, Mus 195 or 395 ; transfer students have one term). (c) Conducting: 6 credit hours, Mus 387, 388, Mus 389.
(d) Orientation to Music Education: 3 credit hours, MuE 326.
(e) Instrumental Teaching Methods: 3 credit hours, MuE 411.
(f) Instrumental Teaching Strategies: 2 credit hours, MuE 414.
(g) Scoring for Voices and Instruments: 3 credit hours, Mus 439 (G). (h) Vocal Techniques: 1 credit hour, MuE 391, Vocal Pedagogy.
(i) Instrumental Techniques : 8 credit hours, MuE 392.
(j) Classroom Instruments: 2 credit hours, MuE 425.
(k) Educational Psychology : 6 credit hours, EPsy 321, 322, 323.
(1) Practicum: 3 credit hours, MuE 409.
(m1) Student Teaching: 15 credit hours in CI 415, 417. Prerequisites of completion of Mus 121, 122, 123; 201, 202, 203, or equivalent ; 221, 222, 223; $224,225,226$, or equivalent; 387,388 , 389; MuE 326, 411, 414 ; EPsy 321, 322, 323; MuE 409 Practicum; two terms on campus ; minimum cumulative grade point average of 2.5 ; faculty approval for admittance into the Teacher Certification Program. ( n ) Completion of courses in College of Education required of all candidates for certification for teaching in secondary schools.
Bachelor of Music in Music Education, Choral-General Option, requires, in addition to the core studies, the following:
(a) Studio Performance: 18 credit hours. Pianists must complete the 200 level requirements in piano (usually
requiring 3 terms or more at the 200 level) and demonstrate voice capability equivalent to completing 3 terms of voice at 74 level or above. Singers must complete the 200 level requirements in voice (usually requiring 3 terms or more at the 200 level) and demonstrate piano capability equivalent to completing 3 terms of piano at the 71 level or above.
(b) Ensemble Performance: 12 terms, appropriately assigned.
(c) Conducting: 6 credit hours, Mus

384, 385, Mus 386.
(d) Orientation to Music Education : 3 credit hours, MuE 326.
(e) Teaching Methods: Elementary Choral and General: 3 credit hours, MuE 412.
(f) Teaching Methods: Secondary Choral and General ; 3 credit hours, MuE 413.
(g) Scoring for Voices and Instruments : 3 credit hours, Mus 439 (G).
(h) Choral Materials : 2 credit hours, MuE 444.
(i) Instrumental Techniques: 3 credit hours in MuE 392; one term in Woodwinds, one term in Brass, one term in Strings.
(j) Vocal Techniques: 1 credit hour, MuE 391, Vocal Pedagogy.
(k) Classroom Instruments: 2 credit hours, MuE 425.
(1) Practicum: 3 credit hours, MuE 409.
(m) Educational Psychology: 6 credit hours, EPsy $321,322,323$.
(n) Student Teaching: 15 credit hours in CI 415,417 , plus student-teaching conferences with the University of Oregon Supervisor of Student Teaching in Choral-General Music concurrent with student-teaching for no additional credit ; prerequisites of completion of Mus 121, 122, 123; 201, 202, 203 or equivalent ; 221, 222, 223, 224, 225, 226 or equivalent ; $384,385,386$; MuE 326 , 412, 413; EPsy 321, 322, 323; MuE 409 Practicum; two terms on campus; minimum cumulative grade point average of 2.5 ; faculty approval for admittance into the Teacher Certification Program.
(o) Completion of courses in College of Education required of all candidates for certification for teaching in secondary schools.
If degree is in a field other than music or is in music at another institution, music endorsement for teacher certification may be granted without History of Music or Scoring for Voices and Instruments (instrumental option only), with only 9 terms ensemble, and with only 12 credits studio performance studies.

Bachelor of Music in Music Education, Combined Instrumental-Choral Option requires, in addition to the core studies, the same courses for either the ChoralGeneral Option or the Instrumental Option above with the following exceptions:
(a) 12 terms of appropriately assigned ensemble including at least 3 terms of instrumental and 3 terms of choral ensemble.
(b) Choose 3 of the 4 Teaching Methods courses: MuE 411, 412, 413, 414.
(c) Complete 200 -level requirements in a major performing medium (usually requiring 3 terms or more at the 200level) and demonstrate piano and voice capability equivalent to completing 3 terms of piano and voice at the MuP 71 and 74 levels.
(d) Instrumental Techniques: From 3 to 8 credits based on students' need as determined in conference with an adviser. If major area is instrumental (including some pianists), 8 credits will be required.
Bachelor of Music in Music Education with State Handicapped Learner
Endorsement requires, in addition to the core studies:
(a) The current music education degree requirements for the Choral-General option or the combined ChoralInstrumental Option.
(b) Exceptional Child: 3 credit hours, SpEd 407.
(c) Psychology Exceptional Child : 3 credit hours, SpEd 462.
(d) Behavior Management: 4 credit hours, SpEd 485.
(e) Communication and Counseling Exceptional Child: 3 credit hours, SpEd 407.
(f) Career Education for the Handicapped: 3 credit hours, SpEd 407.
(g) Teaching Skills I-Reading, II-Language Arts, III-Mathematics : 9 credit hours, SpEd 407.
(h) Practicum I İndividual, II Small Group, III Total Orchestration : 12 credit hours, $\mathrm{SpEd} 409,509$.
(i) The applicant must be accepted into the Handicapped Learner Endorsement Program and must have completed student teaching in music prior to taking any of the required practica.
Bachelor of Music in Composition requires, in addition to the core studies, the following:
(a) Composition I, II, III : 27 credit hours, Mus 240, 241, 242 ; Mus 340, 341, 342; Mus 440, 441, 442.
(b) Ensemble Performance : 9 terms, appropriately assigned.
(c) Studio Performance : proficiency on piano at the level of MuP 271 , or on
two instruments at the level of MuP 171-194, with one of the two being piano.
(d) Public Recital: of compositions written by the student during the course of degree candidacy and during enrollment in Composition II and III. (e) Approval of the student's qualifications for graduation by the composition faculty.

## Bachelor of Music in Music Theory

 reduires, in addition to the core studies, the following:(a) Studio Performance: 18 credit hours, including a minimum of 3 terms at the level of MuP 271-294.
(b) Ensemble Performance: 9 terms, appropriately assigned.
(c) Counterpoint I, II: 10 credit hours, Mus 333, 334, 335 ; Mus 433, 434.
(d) Composition I: 9 credit hours, Mus 240, 241, 242.
(e) Scoring for Voices and Instruments: 3 credit hours, Mus 439 G . (f) Advanced Analysis: 6 credit hours, Mus 430, 431, 432.
(g) Analysis and Criticism : 6 credit hours, chosen from Mus 407 (G) or from Mus 435, Mus 457, Mus 461-477. (h) A senior lecture-recital.

## Graduate Studies

Graduate degrees offered by the School of Music are: Master of Music in Choral Conducting ; Master of Music in Composition; Master of Music in Music Education; Master of Music in Performance and Music Literature;
Master of Music in Performance with a Group Major in Woodwind or Brass Instruments; Master of Arts in Music Education ; Master of Arts in Music History ; Master of Arts in Music Theory ; Doctor of Musical Arts, with primary and supporting areas in: Composition ; History and Musicianship; Music Education ; Performance; Doctor of Education with a primary area in Music Education (through the School of Education) ; Doctor of Philosophy with a primary area in Music Education (through the School of Education).

Note: The Ed.D. and Ph.D. degree programs offer the primary area in music education; the supporting area for these degrees is outside the School of Music. Further information on these degree programs is available from the School of Music office.
Procedures for admission to the master's degree program:
For general University regulations governing graduate admission, see the Graduate School section of this catalog regarding credits, residence, and
transfer of previous graduate work taken elsewhere.

Send to the Director of Graduate Admissions, University of Oregon: (1) Graduate Admission Application form ; (2) A copy of transcripts of all previous undergraduate and graduate study.

Send to the Coordinator of Graduate Studies, School of Music, University of Oregon:
(1) A copy of transcripts of all previous undergraduate and graduate study.
(2) Three written recommendations, one from a major-area professor.
(3) A statement of career goals, including purpose and intent in earning a graduate degree.
(4) A substantial term paper or the like which will demonstrate applicant's capacity to organize and present ideas in formal writing style and good English prose.
(5) Supporting material related to the major area of interest : for performance students, a tape, a repertoire list, and copies of programs from solo public performances; for composers, nusical scores and tapes ; for majors in Music Education, copies of programs conducted.

Proficiency Examinations in Musicianship and Music History : All entering graduate students are required to take the proficiency examinations in Musicianship and History. These examinations will take place during registration week for the fall term of every academic year, during the ninth week of fall, winter and spring terms; before registration and during the seventh week of the summer session. A faculty adviser will use the results of these examinations to prescribe courses as needed to correct deficiences. Students must pass all sections of both examinations before enrolling for a third term of graduate studies. Additional information on these examinations is available from the Graduate Secretary, School of Music.

Requirements for admission to specific programs are as follows:
M.M. in Choral Conducting: minimum of two years successful conducting experience supported by letter of recommendation, tapes, and programs.
M.M. in Composition: demonstration of marked ability and technical skill in composition by submitting to the composition faculty scores of original works for large and small ensembles. The candidate should arrange an interview with a member of the composition staff, if possible, prior to the first term of graduate study.
M.M. or M.A. in Music Education: proficiency to enter MuP 341-362 in voice or on an instrument taught here.
M.A. in Music History or Music Theory: proficiency to enter MuP 341362 in voice or on an instrument taught here.
M.M. in Performance and Music Literature including the Group Major in Woodwind or Brass Instruments: major performance medium proficiency to enter MuP 571-594. Prospective voice majors must also have piano proficiency in sight-reading, transposing, and accompanying sufficient to enter MuP 271.

## Curriculum and Graduation Requirements:

M.M. or M.A. in Music Education: (1) A primary area from the following : Music in Elementary Education; Music in Secondary Education: Band and Orchestra Conducting and Literature ; Choral Conducting and Literature.
(2) A supporting area from the following : Music Supervision ; Performance Studies (student proficiency must be at MuP 471-494 level at entrance) ; Research (thesis required) ; Composition ; Music History and Literature; Theory-Musicianship ; other area of interest in or outside music as approved by a faculty adviser and the Graduate Committee.
(3) Specific course requirements : Basic Concepts in Music Education (Mus 532 ) ; General Seminar in Music Education (MuE 507) ; Research Methods (Mus 511).
(4) Other required courses: Mus 591 598 Ensemble, appropriately assigned, three terms; studio performance instruction, three terms; courses from music history, literature, theory or composition at level 400 (G) or above, 6 credit hours; courses related to the primary area chosen with a faculty adviser, 9 credit hours; courses in expository writing as needed to achieve the ability to organize and present ideas in formal writing style and good English prose.
(5.) Electives: 400 (G) or above, in or outside of music, to complete 48 graduate credit hours.
(6) Language Requirenent for M.A.: reading proficiency in one foreign language, usually German, demonstrated by two years of successful undergraduate study of the language, or by passing an examination administered by the School of Music, or by any other means proposed by the student and accepted by an adviser.
(7) Completion requirement : choose one of the following four options:
(a) comprehensive written examination plus an oral examination; (b) thesis plus an oral examination (thesis will receive nine credits fron among the electives or six hours thesis and three hours research for a total of nine credits) ; (c) major project plus an oral examination (carries two to four credits) ; (d) recital (if a candidate is performing at the level of MuP 571594) plus an oral examination.

## M.A. in Music History or Music Theory:

(1) Course requirements: Research Methods (Mus 511) ; Thesis (Mus 503) 9 credit hours; Ensemble (591598), appropriately assigned, three terms; Studio performance, 3 terms at the appropriate level (only MuP 511 or above yields graduate credit) ; Courses in Music History or Theory at the level of $400(\mathrm{G})$ or above, 18 credit hours.
(2) Electives: Courses (400(G) or above) chosen in consultation with the adviser to complete 48 graduate credit hours.
(3) Language requirenient : reading proficiency in one foreign language, usually German, demonstrated by two years of successful undergraduate study of the language, or by passing an examination administered by the School of Music, or by any other means proposed by the student and accepted by an adviser.
(4) Completion requirements: defined with a faculty adviser; normally an oral examination on the thesis.
M.M. in Performance and Music Literature: available in piano, harpsichord, organ, voice, harp, violin, viola, cello, oboe, flute, clarinet, bassoon, trumpet, trombone, horn, baritone horn, tuba, and saxophone.
(1) Course requirements : Research Methods (Mus 511) ; Studio performance (MuP 571-594) 12 credit hours; Collegium Musicum (Mus 591) one term; Courses or Seminars in Music History or Literature, at $400(\mathrm{G})$ or above, 12 credit hours; Ensemble (Mus 591-598), appropriately assigned, three terms.
(2) Electives: Courses (400(G) or above) chosen in consultation with the adviser to complete 48 graduate credit hours.
(3) Completion requirements: a public recital subject to prior approval of a faculty jury; a final oral examination with emphasis on history, literature and pedagogy of the primary performance medium.

Voice majors must demonstrate competence in Italian, French, and German equivalent to two years of college study of one language, and one year of college study of each of the other two.
Piano majors must take Piano Music (Mus 464, 465, 466).
M.M. in Performance zuith a Group Major in Woodzeind or Brass Instruments:
(1) Course requirements : Research Methods (Mus 511) ; Studio performance ( $\mathrm{MuP} 581-590$ and $\mathrm{MuP} 521-$ 530) to total 15 credit hours; Collegium Musicum (Mus 591) one term; Ensemble (Mus 591-598), appropriately assigned, three terms; WindInstrument Music (Mus 477) one term ; Advanced Pedagogy of Woodwind or Brass (MuE 491) one term; Courses or Seminars in Music History or Literature, at 400 (G) or above, 12 credit hours.
(2) Electives: Courses (400 (G) or above) chosen in consultation with the adviser to complete 48 graduate credit hours.
(3) Completion requirements: a complete public recital of both solo and ensemble music on the primary instrument subject to prior approval of a faculty jury; a performance of a substantial composition on each of two minor instruments during a public student recital; a final oral examination with emphasis on woodwind or brass history, literature, and pedagogy.
M.M. in Composition:
(1) Course requirements : Research Methods (Mus 511) ; Seminar in Composition (Mus 507) 6 credit hours; Thesis (Mus 503) 9 credit hours, an original composition of major proportions composed, performed, and recorded during the period of Master of Music study. Group options : Ensemble (Mus 591-598), appropriately assigned, three terms; two courses in music history to be chosen from Mus 561-565; four courses ( 10 credit hours) chosen from the following: Score Reading (Mus 426-7), Advanced Analysis (Mus 430-1-2), Scoring for Voices and Instruments (Mus 438), Synthesizer Techniques (Mus 443), Advanced Choral Conducting (Mus 485), Advanced Instrumental Conducting (Mus 486), Composition with Electronic Media (Mus 540-1-2), Advanced Pedagogy of Composition (MuE 491), Studio Performance Studies (MuP 541-562).
In addition, two courses from outside the School of Music (400(G) level or above), 4 credit hours.
(2) Electives: Courses (400(G) or above) chosen in consultation with the adviser to complete 48 graduate credit hours.
(3) Completion requirements: (a) Keyboard instrument performance competency at the MuP 271 level or above, or two performance media at the MuP 171 level or above with one of the two being a keyboard instrument. Competency will be determined by audition before appropriate faculty. (b) Performance of compositions: Performance and recording of works composed during the period of the candidate's Master's of Music work to the satisfaction of the Composition Committee. Performances may take place in one or both of the following: a graduate composition recital or public performance approved by the composition faculty. (c) A final oral examination reviewing the candidate's thesis composition.

## M.M. in Choral Conducting:

(1) Course requirements : Research Methods (Mus 511) ; Advanced Choral Analysis (Mus 508) 4 credit hours; Advanced Choral Conducting (Mus 508) 4 credit hours; Advanced Choral Performance (Mus 508) 4 credit hours; Advanced Instrumental Conducting (Mus 486) ; Reading and Conference in Choral Literature (Mus 505) 9 credit hours; Choral Ensemble (Mus 597) three terms; Voice Performance Studies (Studio Instruction) three terms at the appropriate level; two courses in Music History to be chosen from Mus 561-565.
(2) Other required courses: Practicum in Advanced Choral Conducting (Mus 509) three terms, 2 credit hours each tern ; assignment to a major University choral ensemble each of three terms to assist in progrann planning, rehearsals, and performance.
(3) Electives : to be chosen from Scoring for Voices and Instruments (Mus 439(G) ; Advanced Vocal Pedagogy (MuE 491(G) ; Choral Diction (Mus 507) ; Baroque Performance Practice (Mus 589) ; Collegium Musicum (Mus 591) ; to complete 54 graduate credit hours.
(4) Residency requirements: one academic year and two summers in residence on the Eugene campus. The second summer must immediately fellow the year's residency.
(5) Completion requirements: candidates will be required to (a) conduct in not fewer than two public performances presented by University choral ensembles subject to the approval of the
choral faculty ; (b) take a final oral examination.

## Doctor of Musical Arts:

The objective of the doctoral program is to help prepare college music teachers with two areas of advanced competence. Primary and supporting areas of concentration are available in Music Education, History and Musicianship, Performance and Composition. Further information on the Ph.D. and D.Ed. programs is available from the Graduate Secretary, School of Music.

## Procedures for admission to all doctoral degree programs:

For information on University-wide regulations regarding admission, see the Graduate School section of this catalog. Initial admission to doctoral programs in the School of Music is conditional only.

## Conditional Admission:

Send to the Director of Graduate Admissions, University of Oregon :
(1) Graduate Admission Application form.
(2) A copy of transcripts of all previous undergraduate and graduate study.
Send to the Coordinator of Graduate Studies of the School of Music:
(1) A copy of transcripts of all previous undergraduate and graduate study.
(2) Three written recommendations from persons who know the applicant's professional and personal qualifications.
(3) Recent scores of Graduate Record

Examination (GRE) Aptitude Tests, both Verbal and Quantitative ; GRE Advanced Music Test; Miller Analogies Test.
(4) A sample of the applicant's writing, such as a term paper, to demonstrate ability to write acceptable formal English prose about music or the teaching of music.
(5) For students choosing a primary area in Music Education : two letters of reference indicating four years of successful full-time music teaching in either elementary or secondary school or both. For students choosing a supporting area in Music Education: two letters of reference indicating two years of successful full-time teaching in elementary or secondary school or both. (These letters are in addition to the recommendations required of all applicants in (2) above.)
(6) For students choosing a primary or supporting area in History and Musicianship: a document exemplifying the applicant's scholarship and researcl2
ability [this document will serve as the sample of writing requested in (4) above].
(7) For students choosing either a primary or supporting area in Performance: a personal audition or a recent tape recording of the applicant's performance; a list of repertoire and copies of recent programs.
(8) For students choosing either a primary or supporting area in Composition: a score and, if possible, a tape recording of an original composition.
(9) Any other materials the applicant believes will be of interest to the School of Music Graduate Admissions Committee.
Formal Admission: Formal admission is accomplished by appearing before the Graduate Committee during the second or third term of residence (not including summer session). Students must meet this requirement to be permitted to enroll for subsequent terms. Further information about formal admission is available from the Graduate Secretary, School of Music.
Residence Requirement: At least three years of full-time study beyond the baccalaureate degree are required, of which at least one academic year (three consecutive terms of full-time study beginning in the fall term with a minimum of 9 credit hours per term) must be spent in continuous residence on the Eugene campus of the University of Oregon. The three consecutive terms in continuous full-time residence must follow completion of all requirements for all master's degrees.
Graduate Proficiency Examinations: All entering graduate students must take Graduate Proficiency Examinations in History of Music and in Musicianship. A faculty adviser will use the results of these examinations to prescribe courses needed to correct deficiences. Students must pass all sections of both examinations before enrolling for a third term of graduate study. Additional information about these examinations is available from the Graduate Secretary, School of Music.
Language Requirements: Proficiency in one foreign language, usually German, must be demonstrated by all students before advancement to candidacy. Students with a primary or supporting area in Voice Performance must demonstrate proficiency in French, German, and Italian equivalent to two years college study in one and one year in each of the other two. Additional information about this requirement is available from the Graduate Secretary, School of Music.

Program of Study: Courses required of all students :
(1) Concept Development in College Music Teaching (MuE 540-542), three terms beginning fall term only.
(2) Advanced Pedagogy ( MuE 491 G ) , two terms, one each in primary and supporting areas.
(3) Supervised College Music Teaching (MuE 502), two terms, one each in primary and supporting areas.
(4) Research Methods (Mus 511).
(5) Four courses or seminars in Music History or Music Theory, chosen from Mus 407 G or from any course or seminar at the 500 level, two of which must be chosen from Mus 560-565.
(6) Courses outside of music, chosen in consultation with a faculty adviser, excluding courses required in primary or supporting areas and elementary language courses, 9 credit hours.
(7) Three terms in an ensemble chosen in consultation with a faculty adviser.

## Requirements for students with a Primary Area in Performance:

(1) Performance Studies (MuP 671694 ), six terms, 24 credit hours.
(2) Seminar in Thesis Organization (MuE 507).
(3) Thesis (Mus 503), 6 credit hours.
(4) Three public performances on the Eugene campus, one of which must be a solo recital.
(5) A dissertation focusing on some aspect of the performance medium.

Requirements for students with a Supporting Area in Performance:
(1) Performance Studies (MuP 641661 ), three terms, 12 credit hours. (2) Two public performances, one of which must be a solo recital.

Requirements for students with a Primary Area in History and Musicianship:
(1) Thesis (Mus 503), 18 credit hours.
(2) Collegium Musicum (Mus 591), three terms.
(3) Advanced Pedagogy (MuE 491G), Three terms, one each in History, in Musicianship, and in the supporting area.
(4) Supervised College Music Teaching (MuE 502), three terms, one each in History, in Musicianship, and in the supporting area.
(5) Seminar in Thesis Organization (MuE 507).
(6) Two public lecture-demonstrations
or lecture-recitals on the Eugene campus.
Requirements for students with a Supporting Area in History and Musicianship:
Courses in History or Theory, 12 credit hours beyond what is required of all students. Students with this supporting area concentrate in History and Repertoire or Theory and Musicianship. The former normally take all courses in the group Mus 560-565; the latter normally take courses such as Mus 425, 426-7, 430-1-2, 433-4, 435, and seminars in Music Theory, according to course availability and student interest.
Requirements for students with a Primary Area in Music Education:
(1) Research Methods (Mus 513).
(2) Seminar in Thesis Organization
(MuE 507).
(3) Statistical Methods (PE 540, 541 ), or equivalent.
(4) Studio Performance Studies, three terms.
(5) Thesis (MuE 503) 18 credit hours.
(6) Minimum of 15 hours credit in additional graduate MuE courses.

Requirements for students with a Supporting Area in Music Education:
(1) Research Methods (Mus 513).
(2) Statistical Methods (PE 540), or equivalent.
(3) Studio Performance Studies, three terms.
(4) Minimum of 9 hours credit in additional graduate MuE courses.
Requirements for students with a Primary Area in Composition:
(1) Advanced Pedagogy of Musicianship (MuE 491G), one term: (if the supporting area is other than Musicianship, this term will be in addition to the one term required in the supporting area).
(2) Courses in Composition chosen with a faculty adviser, 20 credit hours.
(3) Courses outside of the School of Music, chosen with a faculty adviser, 3 credit hours beyond what is required of all students.
(4) Public performance on the Eugene campus of compositions completed during the period of doctoral study and approved by the composition faculty.
Requirements for students with a
Supporting Area in Composition:
(1) Courses in Composition, Analysis, or Pedagogy of Musicianship or of

Composition, chosen in consultation with a faculty adviser, 12 credit hours.
(2) Public performance on the Eugene campus of compositions completed cluring the period of doctoral study and approved by the composition faculty.

Comprehensive Examinations: Written and oral comprehensive examinations in the primary and supporting areas are taken prior to advancement to candidacy. The examinations are taken only after :
(1) Formal admission to the doctoral program.
(2) Completion of all course work in the area to be examined.
(3) Approval of the dissertation proposal by the dissertation advisory committee.
(4) Approval of the Adviser.
(5) Satisfaction of the language requirement. Further information about comprehensive examinations is available from the Graduate Secretary, School of Music.
Advancement to Candidacy: Advancement to candidacy is based upon successful completion of comprehensive examinations and foreign language requirements, approval of the dissertation proposal by the dissertation advisory committee, and the recommendation of the adviser.
Dissertation Requirement: A dissertation is required in all areas. For candidates whose primary area is composition, the dissertation will be an original composition of major proportions composed during doctoral study, and performed and recorded on the University of Oregon campus. For candidates whose primary area is performance, the dissertation will consist of three required public performances and a written dissertation focusing on some aspect of the performance medium.
Final Examination: A final oral examination is required in all areas, at which time the candidate will be expected to defend the dissertation and show a command of the primary area. Members of the dissertation advisory committee normally conduct the final examination with their appointment subject to the approval of the dean of the Graduate School.

## Music

## Undergraduate Courses

Mus 52. Basic Music. 2 credit hours. Elementary study of terms and notational symbols, designed to develop elementary competence in performing from notation and in notating musical ideas. For general-campus students.
Mus 121, 122, 123. Musicianship I. 4 credit hours each term. Study of the disciplines of hearing, performing, analyzing, improvising, and composing different kinds of music ; terminology, concepts, and the development of aural-visual acuitv. For degree candidates in music. Admission by placement in qualifying examinations. Sequence course. Mus 121 and 122 are offered Pass/No-Pass only. Hurwitz, Kammerer, Owen, Trotter, Tubb.
Mus 191. Collegium Musicum. 1 credit hour any term. Study of music repertoire of the medieval, Renaissance, and baroque periods through rehearsals and extensive sight reading ; vocal and instrumental repertoire Upper-division students enroll in Mus 391. Owen.
Mus 194. Chamber Ensemble. 1 credit hour any term. Study of music through small group rehearsal. For stringed instrument and wind instrument players, percussionists, pianists, and singers. Audition or consent of instructor is required. Upper-division students enroll in Mus 394. May be repeated for maximum of 6 hours credit.
Mus 195. Band. 1-2 credit hours any term Marching Band, fall term only, 2 credits ; Symphonic Wind Ensemble, 1 credit fall term, 2 credits winter and spring terms; Eugene-University Wind Ensemble, 1 credit fall, winter and spring terms; Concert Band, winter and spring term only, 1 credit; Pep Band, winter term only, 1 credit. Upperdivision students enroll in Mus 395. Prerequisite : audition for Symphonic Wind Ensemble and Eugene-University Wind Ensemble; interview for Marching Band, Concert Band, and Pep Band. May be repeated for maximum of 6 terms. Poe, Bennett.
Mus 196. Orchestra. 1-2 credit hours any term. University Symphony Orchestra, 2 credits, University Sinfonietta, 1 credit.
Upper-division students enroll in Mus 396. May be repeated for maximum of 6 terms. Maves, Rider.
Mus 197. Chorus. 1-2 credit hours any term. University Singers, Chamber Choir, Vocal Jazz Ensemble, 2 credits any term; University Chorale, Laboratory Chorus, 1 credit any term. Prerequisite: audition; consent of instructor. Upper-division students enroll in Mus 397. May be repeated for maximum of 6 terms. Saltzman, Miller, Westlund, Stone.
Mus 199. Special Studies. 1-3 credit hours any term.

## Mus 200. SEARCH. 1-3 credit hours.

Mus 201, 202, 203. Introduction to Music and Its Literature. 3 credit hours each term. Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles. Open to general-campus students. Martin.
Mus 221, 222, 223. Musicianship II. 2 credit hours each term. A continuation of Mus 121, 122, 123. Prerequisite : Mus 123 , or equivalent. Tubb, Owen, Hurwitz, Trotter.
Mus 224, 225, 226. Analysis. 2 credit hours each term. Study of basic techniques of analyzing melody, harmony, rhythm, and form in music of a variety of periods and cultures. For degree candidates in music. To be taken concurrently with Mus 221, 222, and
223. Prerequisite : Mus 123 or equivalent. Trombley, Hurwitz, Trotter.
Mus 240, 241, 242. Composition I. 3 credit hours each term. Introduction to basic craft of musical composition. Problems of notation, scoring for instruments, basic concepts of form; emphasis on students' own beginning creative work. Consent of instructor is required. Prerequisite: Mus 123 and Mus 203 or equivalent.
Mus 270. Survey of Jazz in the U.S.A. 3 credit hours. A survey of jazz covering all periods from the turn of the century to the present. Special emphasis on repertoire of the present within an historical perspective. Analysis of the music of jazz artists including Duke Ellington, Count Basie, Woody Herman, Charlie Parker, Miles Davis, etc.
Improvisation and trends in vocal jazz are also discussed. Primarily a listening course. Kammerer, Dowd, Poe.
Mus 321, 322. Music Fundamentals. 2 credit hours each term. Study of musical notation and terminology ; learning musical rudiments through singing simple songs; introduction to simple melodic, rhythmic, and chording instruments. Not open to music majors. Required in the elementary education program and for majors in recreation leadership, camping, and outdoor education. R. Moore, Harrison, Wing. Laboratory fee required.
Mus 333, 334, 335. Counterpoint I. 2 credit hours each term. Contrapuntal technique of the sixteenth through the twentieth centuries; composition and analysis. Prerequisites: Mus 223 and Mus 226 or equivalent.
Mus 340, 341, 342. Composition II. 3 credit hours each term. Composition and public performance of small works for piano, voice, and small ensembles. Consent of instructor is required. Prerequisite : Mus 242.
Mus 361, 362, 363. History of Music. 3 credit hours each term. An intensive study of the history of Western music from its beginnings to the present day. Primarily for degree candidates in music. Prerequisites: Mus 203, Mus 223 and Mus 226, or equivalent.
Mus 384, 385. Choral Conducting I and II. 2 credit hours each term. Study of conducting techniques, with emphasis on practical application to choral organizations; score reading ; analysis and interpretation of choral music. Conducting experience with laboratory chorus. Prerequisites : Mus 223 and 226 or equivalent. Consent of instructor is required. Westlund.

## Mus 386. Instrumental Conducting for

 Choral Majors. 2 credit hours. Study of transposition and instrumental conducting techniques. Third term in the conducting sequence for choral majors. Consent of instructor is required. Prerequisite: Mus 385. Lee.Mus 387, 388. Instrumental Conducting I and II. 2 credit hours each term. Baton techniques, with emphasis on practical applications to instrumental organizations; score reading; general problems of the conductor of larger instrumental ensembles. Conducting experience with laboratory ensembles. Consent of instructor is required. Prerequisites : Mus 223 and 226 or equivalent. Lee.
Mus 389. Choral Conducting for Instrumental Majors. 2 credit hours. Study of choral conducting techniques. Third term in the conducting sequence for instrumental majors. Consent of instructor is required. Prerequisite: Mus 388. Westlund.
Mus 391. Collegium Musicum. 1 credit hour any term. Study of music repertoire of the medieval, Renaissance, and baroque periods through rehearsals and extensive sight
reading; vocal and instrumental repertoire. Owen.
Mus 393. Jazz Ensemble. 1 credit hour any term. (a) Jazz Lab Band. Large ensembles performing progressive jazz-rock repertoire. Performances on campus and at jazz festivals. Improvisation, as well as repertoire study. Entrance by audition, with full year commitment. Dowd. (b) Small Jazz Ensemble. Improvisatory group. Study of current and past small group jazz performances practice. Public performances. Membership in group presumes full year commitment. Entrance by audition and interview with instructor.

## Kammerer.

Mus 394. Chamber Ensemble. 1 credit hour any term. Study of music through small group rehearsal. For stringed-instrument and wind-instrument players, percussionists, pianists, and singers. Audition, or consent of instructor is required. May be repeated for maximum of 6 hours credit.
Mus 395. Band. 1-2 credit hours any term. Prerequisite: upper-division standing, and audition. See Mus 195 for available bands. May be repeated for maximum of 6 terms. Poe, Bennett.
Mus 396. Orchestra. 1-2 credit hours any term. University Orchestra, University Sinfonietta. Prerequisite: upper-division standing; audition. May be repeated for maximum of 6 terms. Maves, Rider.

## Mus 397. Chorus. 1-2 credit hours any

 term. Prerequisite : upper-division standing; audition. See Mus 197 for available choruses. May be repeated for maximum of 6 terms. Saltzman, Miller, Westlund, Stone.Mus 398. Opera Workshop. 2 credit hours any term. Study of traditional and contemporary repertory for the musical theater, through analysis, rehearsal, and performance of complete and excerpted works ; training in stage movement, diction, and rehearsal techniques. Consent of instructor is required. May be repeated for maximum of 6 hours credit. Breidenthal.

## Mus 400. SEARCH. 1-3 credit hours.

Mus 405. Reading and Conference, 1-4 credit hours. Individual study of topics at a level beyond the availability of regularly scheduled classes. Consent of instructor and dean required. Prerequisite : completion of all regularly scheduled classes related to the topic, or equivalent.

## Upper-Division Courses Carrying Graduate Credit

Mus 407. Seminar. (G) Credit hours to be arranged. Studies of various topics at an advanced level, offered periodically according to student and faculty interest and availability.
Mus 410. Experimental Course. (G) Credit hours to be arranged.
Mus 411. Percussion Master Class. (G) 1 credit hour any term. Study of techniques of percussion ensemble, performance, education methods, instrument construction, mallet construction. Enrollment limited to percussion and music education majors. Offered every term. Dowd.
Mus 425. Advanced Keyboard Harmony. (G) 2 credit hours. Realization of figured bass notation in the light of baroque performance practices. Prerequisites : Mus 223, Mus 226, Mus 335 , or consent of instructor. Owen.
Mus 426, 427 . Score Reading. (G) 2 credit hours each term. Analysis of musical scores of composition for small and large ensembles involving transposition of parts; use of the piano as a means of studying ensemble scores. Maves.

Mus 430, 431, 432. Advanced Analysis. (G) 2 credit hours each term. Advanced analytical techniques, especially those developed by Heinrich Schenker and Felix Salzer, applied to music of all period and styles. Prerequisites : Mus 223 and Mus 226. Bergquist.
Mus 433, 434. Counterpoint II. (G) 2 credit hours each term. Continuation of Counterpoint $I$, with emphasis on canon and fugue, and on twentieth-century techniques. Prerequisite: Mus 335 .
Mus 435. Experiments in Improvisation and Composition. (G) 3 credit hours. Mus 436, 437. Advanced Scoring for Instruments. (G) 2 credit hours each term. Continuation of Mus 338. Emphasis on the scoring of original work and on the arranging of major works from other media; study of various styles of scoring by master composers. Prerequisite: Mus 338.
Mus 439. Scoring for Voices and Instruments. (G) 3 credit hours. Techniques of arranging and scoring for various types of choral and instrumental groups. Performance by class members of arrangements and original scores written and conducted by class members. Prerequisites: Mus 223 and Mus 226. Owen, Tubb, Kammerer.

## Mus 440, 441, 442. Composition III. (G)

 3 credit hours each term. Composition and public performance of works including large ensembles and electronic music. Consent of instructor is required. Prerequisite : Mus 342.Mus 443. Synthesizer Techniques. (G) 3 credit hours. Basic principles and techniques of music synthesis; laboratory experience using the Moog Synthesizer and other related equipment in the electronic music studio of the School of Music. Consent of instructor is required. Owen.
Mus 450. Listening with Understanding. (g) 3 credit hours. Introduction to perceptive listening through experiencing and analyzing various types of music ; collateral reading and class discussion. Not open to music majors or students with credit in Mus 201, 202, 203.
Mus 451. The Music of Bach and Handel. (g) 3 credit hours. Study of selected compositions by Bach and Handel, as masterful examples of the concerto grosso, dance suite, organ chorale, cantata, oratorio, opera, and mass ; cultural context in Germany, France, Italy, and England for the development of their styles. Primarily for nonmajors.

## Mus 452. The Classic Symphony and

 Sonata. (g) 3 credit hours. Study of symphonies and sonatas by Haydn, Mozart, and Beethoven; elements of style in the Viennese classic period, and its legacy in the nineteenth century. Primarily for nonmajors.Mus 453. Introduction to Opera. (g) 3 credit hours. Class study of such operas of Lenozzeldi Figaro, Carmeju, Otello, Tristan und Isolde, Pelléas et Melisande, The Rake's Progress, as masterpieces fusing theatrical and musical modes of dramatic expression. Primarily for nonmajors.

## Mus 454. Introduction to Twentieth-

 Century Music. (g) 3 credit hours. Evolution and revolution in musical style since Debussy and Mahler ; study of selected masterpieces by such composers as Stravinsky, Bartók, Schoenberg, Copland, and Varèse. Primarily for nonmajors.
## Mus 455, 456. Lyric Diction. (G) 3 credit

 hours each term. Fundamentals of pronunciation of Italian, German, French, and English with emphasis on the singer's approach to performance. Use of International Phonetic Alphabet in analysis and transcription of song and opera texts. Fall term, Italian andGerman; winter term, French and English. The two terms need not be taken in sequence. Breidenthal.

## Mus 457. Sacred Choral Music. (G) 3

 credit hours. Survey of choral music for church and concert use based on liturgical and nonliturgical sacred themes; performance practices of various styles; development of criteria for judging esthetic quality of the music and its performance.Mus 458. Music in World Cultures. (g) 3 credit hours. A survey of music as a cultural phenomenon. Instruction aims at developing discriminating, responsive listeners and is free of concern with musical notation. Acquaintance with several repertories from Asia, Africa, and the oral traditions of Euroamerican culture ; examination both of musical styles and of the uses of music as social behavior. One term yearly. Primarily for nonmajors. Trotter.

## Mus 461, 462, 463. Music for Chamber

 Ensemble. (G) 2 credit hours each term. Study of the basic repertory for string quartet and other ensembles using piano and strings, with emphasis on listening and analysis. Prerequisite: Mus 363. Hladky.Mus 464, 465, 466. Piano Music. (G) 2 credit hours each term. Survey of solo piano music from J. S. Bach to the present; original works for four hands and for two pianos; the concerto; emphasis on style as it affects performance. Prerequisite : Mus 363. Woods. Mus 467, 468, 469. Solo Vocal Music. (G) 2 credit hours each term. Solo songs with accompaniment ; the lute air and Purcell; the nineteenth-century art songs in Germany and France; twentieth-century British, American, and continental song literature ; development of bases for artistic performance and sound critical judgment through study of text, voice, and accompaniment. Prerequisite: Mus 363. Miller. Not offered 1978-79.
Mus 470, 471, 472. Orchestral Music. (G) 2 credit hours each term. Major types of orchestral music, from the eighteenth to the twentieth century; dance suite, symphony, tone poem, descriptive suite; pieces for string orchestra. Prerequisite: Mus 363. Hladky.
Mus 473, 474, 475. History of Opera. (G) 2 credit hours each term. Critical study of the musical and dramatic content of operas. forming the standard international repertoire. Mus 473 ; antiquity to Mozart. Mus 474 ; Mozart to Verdi. Mus 475; Wagner to the present. Prerequisite: Mus 363. Miller, Wilson.
Mus 476. Organ Music. (G) 3 credit hours. The organ in church and concert ; organ repertoire from the fifteenth century to the present. Prerequisite: Mus 363. Hamilton.
Mus 477. Wind-Instrument Music. (G) 3 credit hours. Survey of music for wind instruments and band from the sixteenth century to the present. Emphasis on style and performance practice and on the development of bases for critical judgment in the selection of wind instrument and band music. Prerequisite: Mus 363.
Mus 485. Advanced Choral Conducting. (G) 3 credit hours. Refinement of choral conducting techniques; study of musical scores from contemporary and earlier periods, with emphasis upon analysis, interpretation, and rehearsal procedures. Review of organizational and administrative procedures for choral organizations. Prerequisite : Mus 384, 385, 386. Saltzman.
Mus 486. Advanced Instrumental Conducting. (G) 3 credit hours. The study of conducting techniques as applied to band and orchestral music, with emphasis on various
styles and periods of music ; study of twen-tieth-century rhythms and related conducting problems. Prerequisite: Mus 387, 388. 389.

## Graduate Courses

Mus 501. Research. Credit hours to be arranged. No-grade course.
Mus 503. Thesis. Credit hours to be arranged. No-grade course.
Mus 505. Reading and Conference. 1-4
credit hours. Individual study of topics beyond the availability of regularly scheduled classes. Consent of instructor and dean required. Prerequisite : completion of all regularly scheduled classes related to the topic, or equivalent.
Mus 507. Seminar. Credit hours to be arranged. Studies of various topics at an advanced level, offered periodically according to student and faculty interest and availability.
Mus 510. Experimental Course. Topics and credit to be arranged.
Mus 511, 512, 513. Research Methods in Music. 3 credit hours each term. Mus 511: use of reference, research, and bibliographical sources in music. Mus 511 is prerequisite to either Mus 512, a consideration of research methods in music history and theory, or Mus 513, a consideration of experimental research including problem identification, research design, influencing variables, tools of research, and the interpretation of data in relation to the teaching of music. Bergquist, Hamilton, Martin, others.
Mus 533, 534. Twentieth-Century Counterpoint. 2 credit hours each term. Techniques of present-day contrapuntal practice ; application in larger contrapuntal forms. Prerequisite : Mus 434.
Mus 540, 541, 542. Composition with
Electronic Media. 3 credit hours each term. Electronic-music instruments and techniques; creative use of Moog Electronic Music Synthesizer and tape-recording equipment. Prerequisite : graduate standing. Consent of instructor is required.
Mus 543, 544. Notation of Medieval and Renaissance Music. 3 credit hours each term. Study of representative examples of notational systems and practices in western European polyphony from 900 to 1600 . Bergquist.

## Mus 560. Music in the Middle Ages. 3

 credit hours. Sources of Western European music in Classical Antiquity and the Near East ; sacred monophony, especially Gregorian chant ; secular monophony; development of polyphony, especially in the School of Notre Dame, the 13 th-century motet, and the French and Italian Ars nova. Bergquist.Mus 561. Music in the Renaissance. 3 credit hours. Formation of the central Renaissance style in 15th-century France and Italy: Dufay and Ockeghem ; High Renaissance Music: Josquin, Gombert and Willaert; Late Renaisance music : Palestrina, Lasso, and Gabrieli ; developments in England and Germany ; instrumental music; Renaissance music theory. Bergquist.
Mus 562. Music in the Baroque Era. 3 credit hours. From the Florentine Camerata through the rococo; the new monody, opera, oratorio, cantata, sonata, concerto, suite, and fugue; national styles; performance practices; analysis of representative works, with an emphasis on J. S. Bach. Trombley, others.

## Mus 563. Music in the Classical Period.

3 credit hours. Sources of classic style and their culmination in the Viennese high classical style of Haydn, Mozart, and Beethoven.

Dramatic forms and procedures in opera. Bergquist, others.
Mus 564. Music in the Romantic Era. 3 credit hours. The heritage of Beethoven ; virtuosic and lyric extremes in instrumental and vocal styles. Literary romanticism, descriptive music, and the Licd; opera in France and Italy; Wagner's music drama as Gesamtkunstzcerk; the rise of music nationalism; Wagnerism in France. Bergquist, others.
Mus 565. Music in the Twentieth Century. 3 credit hours. The crisis of Romanticism and tonality : the transition of Debussy, Mahler, and others; formation of new styles by Stravinsky, Schoenberg, Bartók; developments in the United States; implications of recent developments. Bergquist, others.
Mus 589. Baroque Performance Practice. 3 credit hours. Introduction to seventeenthand eighteenth-century performance practices; investigation of primary sources; comparative study of recorded examples; preparation of a performing edition; class demonstrations. Trombley.
Mus 591. Collegium Musicum. 1 credit hour any term. See Mus 391 for additional information.
Mus 593. Jazz Ensemble. 1 credit hour any term. See Mus 393 for additional information. Mus 594. Chamber Ensemble. 1 credit hour any term. See Mus 394 for additional information
Mus 595. Band. 1-2 credit hours any term. See Mus 195 for additional information.
Mus 596. Orchestra. 1-2 credit hours any term. See Mus 196 for additional information. Mus 597. Chorus. 1-2 credit hours any term. See Mus 197 for additional information.
Mus 598. Opera Workshop. 2 credit hours any term. See Mus 398 for additional information.

## Music Education

## Undergraduate Courses

## MuE 199. Special Studies. 1-3 credit hours

 any term.MuE 200. SEARCH. 1-3 credit hours.
MuE 326. Orientation to Music Education. 3 credit hours. Observation of the total school music program (grades one through twelve). Includes dialogue with local teachers. Open to school administrators and teachers in areas other than music. McManus, others.
MuE 383. Music Methods for Elementary Teachers. 3 credit hours. Planning and organizing musical activities for elementary school children; opportunities for presenting and testing ideas and techniques. Required for elementary-education majors. Prerequisite: Mus 321, 322. Laboratory fee required. R. Moore, Harrison, Wing.

MuE 391. Voice Pedagogy. 1 credit hour any term. Vocal techniques for chorus, studio, and class instruction. Methods and materials for adolescent and mature soloists. Bailey.
MuE 392. Instrumental Techniques. 1 credit hour any term. Elementary instruction in pedagogy and performance of various instruments. Sections in : Strings. Woodwinds, Brass, Percussion, Flute, Clarinet and Sax, Oboe and Bassoon, Violin and Viola, Cello. Primarily for majors in music education. Two recitations. Instrument rental fee, $\$ 3.00$ per term.
MuE 400. SEARCH. 1-3 credit hours.
MuE 405. Reading and Conference. 1-4 credit hours. Individual study of topics at a level beyond the availability of regularly scheduled classes. Consent of instructor and dean required. Prerequisite : completion of all regularly scheduled classes related to the topic, or equivalent.
MuE 410. Experimental Course. (G) Credit hours to be arranged.
MuE 411. Teaching Methods: Instrumental. 3 credit hours. Precedes student teaching. Consideration of the concerns of music teachers in the secondary and elementary schools. Obseryations, procedures, and instructional materials; planning and teaching lessons for analysis and criticism. Required for all candidates for certification. McManus.
MuE 412. Teaching Methods: Elementary Choral and General. 3 credit hours. See MuE 411 for details. R. Moore.
MuE 413. Teaching Methods: Secondary Choral and General. 3 credit hours. See MuE 411 for detail. Wing.
MuE 414. Instrumental Teaching Strategies. 2 credit hours. Learning comprehensive musicianship through orchestra and band performance in a laboratory setting. Performance on primary and secondary instruments, conducting, developing teaching strategies with goals and objectives. McManus.
MuE 419. Senior Colloquium in School Music. 3 credit hours. An analysis of the interrelationships among the various areas of the field of music ; to be taken in the last term of the senior year.
MuE 425. Classroom Instruments. 2 credit hours. Basic performing skills on the recorder and guitar, and advanced strumming techniques on the Autoharp. Consent of instructor is required. R. Moore, Harrison.
MuE 426. The General Music Program: Elementary. 3 credit hours. Musical development of children from nursery school through elementary school ; curriculum, methods, materials, and evaluation.

## Upper-Division Courses Carrying Graduate Credit

MuE 407. Seminar. (G) 1-3 credit hours. Studies of various topics at an advanced level, offered periodically according to student and faculty interest and availability.
MuE 408. Workshop. (G) $1-4$ credit hours. Offered periodically.
MuE 409. Practicum. (G) 1-4 credit hours. Supervised experience in guiding learning activities. Consent of instructor and dean required
MuE 427. The General Music Program Secondary. (G) 3 credit hours. Objectives, procedures, instructional materials, and evaluation of music programs for the general student in both junior and senior high schools.
MuE 444. Choral Materials for Schools. (G) 2 credit hours. Repertoire for choral groups in secondary schools; review of choral music from early historical periods to the avant-garde; development of criteria for selection of choral music ; instructional program and concert planning. Westlund.
MuE 445. String Materials for Schools. (G) 2 credit hours. Repertoire for orchestra and other stringed-instrument groups in elementary and secondary schools; problems of leadership presentation, organization, and program planning. Consent of instructor is required.
MuE 446. Wind-Instrument Materials for Schools. (G) 2 credit hours. Repertoire for bands and other wind-instrument groups in elementary and secondary schools; problems of leadership, presentation, and organization. Consent of instructor is required. J. R. Moore.
MuE 447. Psychology of Music. (G) 3 credit hours. Functions of the musical mind; knowledge and intellectual skills related to mature musical perception; implications for the teaching of music. Prerequisite : EPsy 323, or equivalent. Wilson.
MuE 491. Advanced Pedagogy. (G) 3 credit hours any term. Sections in: brass, college music-education courses, composition, history, musicianship, percussion, piano, stringed instruments, voice, woodwinds Maximum of 9 credit hours permitted.

## Graduate Courses

MuE 501. Research. Credit hours to be arranged. No-grade course. Consent of instructor and dean is required.
MuE 502. Supervised College Music
Teaching. Credit hours to be arranged. Doctoral students only.
MuE 503. Thesis. Credit hours to be arranged. No-grade course. Consent of instructor is required.
MuE 505. Reading and Conference. 1-4 credit hours. Individual study of topics beyond the availability of regularly scheduled classes. Consent of instructor and dean required. Prerequisite : completion of all regularly scheduled classes related to the topic, or equivalent.
MuE 507. Seminar. Credit hours to be arranged.
History of U.S. Music Education. Fall
General Seminar in Music Education. Winter
Thesis Organization. Winter, spring.
New Trends in Music Education. McManus, fall.
MuE 509. Practicum. 1-4 credit hours.
Profesionally related experience on campus or elsewhere, with supervision by a qualified expert both in planning and in carrying out the project. Consent of instructor and dean
required. Prerequisite : knowledge and competence both in the substance of the activity and in curricular planning.
MuE 510. Experimental Course. Credit hours to be arranged.
MuE 532. Basic Concepts in Music Education. 3 credit hours. The introductory course for students of music education entering the master's degree program ; review of recent developments and their implications; principles and issues; historical perspectives.
MuE 533. Music in the Elementary School. 3 credit hours. Curricula, materials, and procedures of teaching general music in the elementary school. Harrison.
MuE 534. Music in the Junior High School. 3 credit hours. Current concerns and philosophies related to music in the junior high school and in the life of its students.
MuE 535. Music in the Senior High School. 3 credit hours. Curricula, organization, methods, and materials in senior highschool music, both vocal and instrumental.
MuE 536. Administration of School Music 3 credit hours. Principles underlying a sound policy in the administration of school music programs; budgets, personnel, curriculum, facilities. McManus.
MuE 538. Curriculum Development in Music. 3 credit hours. Application of curricular theory to the construction of courses of study in music ; determination of objectives, content, and instructional materials ; development of evaluative criteria.
MuE 540, 541, 542. Concept Development in College Music Teaching. 3 credit hours each term. Developing knowledge, skills, and attitudes useful for teaching music, and exploring their relationship to selected current principles of educational psychology. instructional techniques, tests and measurements. For doctoral students only. Consent of instructor is required. Martin.

## Performance Studies (Studio Instruction)

## Undergraduate Courses

MuP 50-57. Basic Performance Studies.
1 credit hour any term. Consent of instructor is required. Maximum of 3 credit hours permitted. N.o-grade course.
MuP 50. Piano.
MuP 51. Voice.
MuP 52. Strings.
MuP 53. Woodwinds.
MuP 54. Brass.
MuP 55. Percussion.
MuP 56. Guitar.
MuP 57. Recorder.
MuP 71-92. Intermediate Performance Studies. 1 credit hour any term. (Formerly
Mus 90.) Instruction in performance for students with minimal previous training. Audition, consent of instructor required Maximum of 3 credit hours permitted.
No-grade course. Extra fee.
MuP 71. Piano. Steinhardt, Thal, Woods, Benson.
MuP 72. Harpsichord. Hamilton.
MuP 73. Organ. Hamilton.
MuP 74. Voice. Bailey, Breidenthal, Miller, Wilson.
MuP 75. Violin. Maves, Koscielny.
MuP 76. Viola. Maves, Koscielny.
MuP 77. Cello. Hladky
MuP 78. Bass. Hladky.
MuP 79. Harp. Maxwell.
MuP 80. Guitar.
MuP 81. Flute. Thombley.
MuP 82. Oboe. J. R. Moore.
MuP 83. Clarinet. McManus, Bennett.
MuP 84. Saxophone. J. R. Moore.
MuP 85. Bassoon. Bergquist.
MuP 86. Trumpet. Poe.
MuP 87. French Horn. Kammerer.
MuP 88. Trombone. Lee.
MuP 89. Baritone. Lee.
MuP 90. Tuba. Lee.
MuP 91. Percussion. Dowd.
MuP 92. Recorder. Owen.
MuP 171-194. Performance Studies (Studio Instruction). 1-4 credit hours any term (Formerly Mus 190.) Technical and stylistic aspects of artistic solo performance; first level of lower-division study. For instructors, see MuP 71-92. Added at this level are MuP 193 Fortepiano and MuP 194 Clavichord, both Benson. Degree candidates specializing in performance normally enroll for two halfhour lessons per week. Degree candidates with other specializations in music enroll for one half-hour lesson per week. Daily practice schedule determines hours of credit. Maximum credit permitted degree candidates outside music is 12 credit hours. Maximum credit for music majors working toward the B.A. or B.S. degree is 24 credit hours with not more than 12 credit hours in MuP 171-194, MuP 271-294. Audition, consent of instructor required. Enrollment quotas imposed in all media at all levels. Instruction in guitar not available at upper-division or graduate levels. Students majoring in music receive studio instruction in one medium without extra fee at the level of MuP 171-194 and above, with the following exceptions: (1) all students of harp and guitar pay an extra fee ; (2) students for whom studio instruction in a second medium is an explicit degree requirement receive such instruction as is available without extra fee. Information concerning levels of proficiency at each level in each medium, $\mathrm{MuP} 71-92$ through MuP 671-694, may be obtained from the School of Music office.

MuP 200. SEARCH. 1-3 credit hours. MuP 271-294. Performance Studies (Studio Instruction). 1-4 credit hours any term. (Formerly Mus 290.) Second level of lowerdivision study. For details, see MuP 171-194. Consent of instructor is required. Prerequisite : proficiency required for satisfactory completion of instruction at the level of MuP 171-194.
MuP 341-362. Performance Studies (Studio Instruction). 1-2 credit hours any term.
(Formerly Mus 391.) Upper-division study for qualified degree candidates. For details, see MuP 171-194. Consent of instructor is required. Prerequisite: jury audition; proficiency required for satisfactory completion of instruction at the level of MuP 271-294. MuP 341. Piano. Steinhardt, Thal, Woods, Benson.
MuP 343. Organ. Hamilton.
MuP 344. Voice. Bailey, Breidenthal, Miller, Wilson.
MuP 345. Violin. Maves, Koscielny.
MuP 346. Viola. Maves, Koscielny.
MuP 347. Cello. Hadky.
MuP 348. Bass. Hladky.
MuP 349. Harp. Maxwell.
MuP 351. Flute. Trombley.
MuP 352. Oboe. J. R. Moore.
MuP 342. Harpsichord. Hamilton.
MuP 353. Clarinet, McManus, Bennett.
MuP 354. Saxophone. J. R. Moore.
MuP 355. Bassoon. Bergquist.
MuP 356. Trumpet. Poe.
MuP 357. French Horn. Kammerer.
MuP 358. Trombone. Lee.
MuP 359. Baritone. Lee.
MuP 360. Tuba. Lee.
MuP 361. Percussion. Dowd. MuP 362. Recorder. Owen.

MuP 371-394. Performance Studies (Studio Instruction). 2-4 credit hours any term. (Formerly Mus 390.) First level of upperdivision study for degree candidates. For details, see MuP 171-194. Consent of instructor is required. Prerequisite : jury audition; proficiency required for satisfaction completion of instruction at the level of MuP 271-294.
MuP 400. SEARCH. 1-3 credit hours.
MuP 410. Experimental Course. (G) Topics and credit hours to be arranged.
MuP 471-494. Performance Studies (Studio Instruction). 2-4 credit hours any term. (Formerly Mus 490.) Second level of upperdivision study for degree candidates preparing a recital. For details, see MuP 171-194. Consent of instructor is required. Prerequisite : proficiency required for satisfactory completion of instruction at the level of MuP 371-394.

## Graduate Courses

MuP 510. Experimental Course. Topics and credit hours to be arranged.
MuP 511-532. Performance Studies (Studio Instruction). 1 credit hour any term. (Formerly Mus 592.) Beginning study for graduate students in a secondary performance medium. For details, see MuP 171-194. Consent of instructor is required. Prerequisite: jury audition in the primary performance medium to demonstrate proficiency required for admission to MuP 341-362 or MuP 371-394. May be repeated for maximum of 3 credit hours.

MuP 541-562. Performance Studies (Studio Instruction). 1-2 credit hours any term. (Formerly Mus 591.) Graduate-level study for degree candidates specializing in other than performance. For details, see MuP 171-194. Consent of instructor is required. Prerequisite: jury audition to demonstrate proficiency required to complete MuP 271-294. May be repeated for maximum of 6 credit hours.
MuP 571-594. Performance Studies (Studio Instruction). 2-4 credit hours any term. (Formerly Mus 590.) Master's level study for master's degree candidates specializing in performance. For details, see MuP 171-194. Consent of instructor is required. Prerequisite jury audition to demonstrate proficiency required to complete MuP 471-494; sufficient talent and experience to justify the undertaking of performance as a supporting area. MuP 641-661. Performance Studies (Studio Instruction). 1-4 credit hours any term. (Formerly Mus 491.) Doctoral-level study for degree candidates with a supporting area in performance. For details, see MuP 171-194. Consent of instructor is required. Prerequisite: jury audition to demonstrate proficiency required to complete MuP 571-594; sufficient talent and experience to justify the undertaking of performance as a supporting area.
MuP 671-694. Performance Studies (Studio Instruction). 2-4 credit hours any term.
(Formerly Mus 690.) Doctoral-level study for degree candidates with a primary area in performance. For details, see MuP 171-194. Consent of instructor is required. Prerequisite : jury audition to demonstrate proficiency required to complete MuP 571-594; sufficient talent and experience to justify the undertaking of performance as a primary area.


## Reserve

Officers Training
Corps

# Military Science Studies 

Staff

James J. Helbling, Lieutenant Colonel, U.S. Army, Department Head, Professor of Military Science. B.C.S., Seattle University, 1958; M.P.A., Brigham Young University, 1976.
Henry G. Anthony, Major, U.S. Army, Assistant Professor of Military Science. B.S., Columbus College, 1973 ; M.S., Troy State University, 1978.
Adolfo Sierra, Sergeant Major, U.S. Army, Special Staff.
Paul R. Leee, Master Sergeant, U.S. Army, Special Staff.

The Department of Military Science is organized as a regular instructional division of the University. The mission of the department is to select and prepare students to serve as commissioned officers in the United States Army. The instruction includes a two year lower-division program and a two year upper-division program. Graduate students are eligible for entry in the program; however, graduate credit is not given for the courses of instruction.
Lower-Division Program: The lowerdivision program is elective for men and women students who are citizens of the United States and who meet prescribed physical standards. Students who are enlisted members of any of the reserve forces of the armed services or who have served on active duty as an enlisted person in any of the armed services should consult the department concerning eligibility for advanced standing.
Upper-Division Program: The upperdivision program includes two years of instruction on the University campus, plus a summer training period. Completion of the program and academic requirements for a baccalaureate degree qualifies the student for appointment as a commissioned officer.

The summer-training period, normally in the summer between the student's junior and senior year, is conducted at one of the regular installations of the Army. It provides application of leadership theory and familiarization with weapons, operations, organizational methods, and installational activities.

Students enrolled in the upperdivision program receive a stipend for a total period of not to exceed twenty months ( the current rate is $\$ 100$ a month). Students are issued all required textbooks and uniforms. During the summer-training period, students are provided food and lodging, are paid at half of the rate of an Army second lieutenant, and receive a travel allowance of six cents a mile to and from the training installation. To be admitted to the upper-division program, a student must have satisfied the requirements of the lower-division program by :
(1) taking Military Science 121, 122, 123 and Military Science 221, 223, 224 in a normal progression- 1 course per term for 6 terms; or
(2) compressing one or more of the 100 or 200 series courses in a given term until all six courses are completed; or
(3) attending a summer course on compus in which the 100 and 200 series courses are taught ; or
(4) attending a six-week field training course at an Army installation during the summer between his/her sophomore and junior year ; or
(5) individualized instruction arranged with the departmental staff.

Veterans of enlisted service may apply for advanced placement based upon their military experience and training. Other qualifications for eligibility are as follows:
(1) Acceptance by the University of Oregon as a regularly enrolled student.
(2) Ability to complete all requirements for appointment as a second lieutenant before reaching 28 years of age ; this requirement may be waived.
(3) Successful completion of such survey or general screening tests as may be prescribed.
(4) United States citizenship.
(5) Physical qualification for appointment as a commissioned officer.
(6) Execution of a written agreement with the United States government to complete the two year upperdivision program, including attendance at the summer-training period, and to satisfy the service obligation after graduation.

Students accepted for enrollment in the lower-division program have no
commitment to the U.S. Army. Students enrolled in the upper-division program are enlisted in the armed services reserves until completion of the program.
Scholarships: The Army annually awards scholarships, providing full tuition, book allowance, and incidental fees, to well-qualified students enrolled in the program of the Department of Military Science. Scholarship recipients also receive a monthly subsistence allowance of $\$ 100$. The University is guaranteed a minimum of one threeyear scholarship (for which freshmen may apply) and one two-year scholarship (for sophomores). More may be awarded depending on the merits of the applicants.

Extracurricular Activities: The department supports the activities of a number of cadet organizations such as a color guard, rifle team, and, for those interested in outdoor activities and individual skills, there is marauder (ranger) training.

## Curriculum: The curriculum is an

 interdisciplinary course of study designed to meet the following objectives: (1) a general knowledge of the historical development of the United States Army and of the Army's role in support of national objectives ;(2) a working knowledge of the general organizational structure of the Army, and of how the various components thereof operate as a team in the fulfillment of overall objectives; (3) a strong sense of personal integrity, honor, and individual responsibility; knowledge of human relationships involved and an understanding of the responsibilities inherent in assignments within the military service; (4) ability to communicate effectively both orally and in writing ; and (5) sufficient knowledge of military life to insure a smooth transition from the normal civilian environment.

## Undergraduate Courses

Mil 121, 122, 123. Military Science I. 1 credit hour each term. Organization and missions of the armed forces; concepts of leadership ; map and aerial photograph reading; introduction to tactics; and leadership development.

Mil 221, 222, 223. Military Science II. 1 credit hour each term. Topical military subjects such as civilian control of the military ; the impact of logistics on military operations; the professional soldier's place in society. Laboratory in leadership development.
Note: During the period of enrollment in the program, each cadet is required to enroll in a one-term 3-credit course in military history taught by the History Department, and a one-term 3-credit course in international relations from the regular offerings of the Political Science or other appropriate department. These courses satisfy group requirements for a baccalaureate degree.
Mil 321, 322, 323. Military Science III. 3 credit hours each term. Leadership, military teaching principles; tactics and communication; leadership development.
Mil 405. Reading and Conference. Credit hours to be arranged. Supervised individual studies, covering portions of the material of Mil 121, 122, 123, 221, 222, 223, 321, 322, 323, or $411,412,413$. Total credit earned in these sequences and in Mil 405 may not exceed 24 credit hours. Consent of instructor is required.
Mil 411, 412, 413. Military Science IV. 3 credit hours each term. Staff and command functions in the military; military justice; leadership; service orientation; leadership development.

## Aerospace Studies

## Staff

Gary M. Luebbers, Captain (USAF), M.P.A., Assistant Professor of Aerospace Studies. B.S., Culver-Stockton College, 1973 ; M.P.A., Southern California, 1976.
Kenneth R. Molly, Lt. Colonel (USAF), M.S., Assistant Professor of Aerospace Studies. B.S., Nebraska; M.S., 1973, Arkansas.

Donald M. Travis, Captain (USAF), M.B.A., Assistant Professor of Aerospace Studies. B.S., Colrado State, 1967 ; M.B.A., Oregon. 1975.
L. D. Watters, Staff Sergeant, Administration.
W. R. Stewart, Staff Sergeant, Personnel.
J. R. Speich, Staff Sergeant, Personnel.

The Aerospace Studies curriculum is designed to provide education that will develop skills and attitudes vital to the career of the professional Air Force officer, and to qualify college men and women for commissions in the United States Air Force. It includes two major activities: Aerospace academic instruction and leadership laboratory.

Students qualify for appointment as commissioned reserve officers upon completion of the upper-division program and the award of the baccalaureate degree.

Truo prograns geared for commissioning are available for college students. Freshmen may enroll in the AFROTC four-year program, and students with at least two years of undergraduate or graduate work remaining may apply for the two-year program.

In the four-year program, students must complete the lower-division courses, pass the Air Force Officers Qualifying Test and an Air Force medical examination, and be selected by an interview board of Air Force Officers. A four-week Field Training session must be completed at an Air Force base prior to entry into the last two years of the program.

In the two-year program, students must meet the same requirements except that they complete a six-week field training course and only the last two years of the program.

All cadets in the last two years of either program receive $\$ 100$ per month (tax-free) during the school year.

Flight training: The Air Force offers a flight instruction program to senior cadets who will enter pilot training. The flight instruction program is conducted at a local FAA-approved civilian flying school, providing flight instruction of sufficient scope to determine the student's aptitude and suitability for additional flight training on active duty.

Women in AFROTC: Women may receive a commission through AFROTC. The programs and scholarships for women are identical to those for men, except that women are ineligible for training leading to combat assignment. Women are not eligible for flying training through AFROTC at present.

Scholarships: Students in the four- or two-year programs may compete for scholarships which pay tuition, laboratory and incidental fees, an allowance for books, and a $\$ 100$ monthly tax-free allowance. Scholarships are available for pilot, navigator, missile, and technical/scientific career fields such as computer science, mathematics, and physics. High school students interested in scholarships should contact the nearest AFROTC detachment not later than the fall term of their senior year.

Career opportunities: Flying candidates may receive end assignments in any of a wide variety of flying organizations. Nonflying candidates may expect end assignments in the Missile, TechnicalResearch and Development, or support career fields.

## Undergraduate Courses

AS 121, 122, 123. Aerospace Studies I. 1 credit hour each term. Study of U.S. Air Force, strategic-offense forces, generalpurpose forces, and Aerospace support forces. Leadership laboratory provides practical leadership experience in basic military activities, and in officers' conduct. Not offered 1978-79.
AS 221, 222, 223. Aerospace Studies II. 1 credit hour each term. Examination of the development of Air Power over the past sixty years, various concepts of employment, factors prompting research and technological change. Not Offered 1978-79.
Note : During the period of enrollment in the program, each cadet is required to enroll in a one-term, 3 -credit course in military history taught by the History Department, and a one-term, 3 -credit course in international relations from the regular offerings of the Political Science or other appropriate department. These courses satisfy group requirements for a baccalaureate degree.
AS 321, 322, 323. Aerospace Studies III.
3 credit hours each term. Study of Air Force leadership at the junior-officer level, including theoretical, professional and legal aspects; study of military management functions, principles, and techniques. Leadership Laboratory provides varied advanced leadership experiences.
AS 350. Private Pilot Ground Instruction. 3 credit hours. Ground school instruction of sufficient scope to insure that the student meets Federal Aviation Agency requirements for student pilots, and to prepare the student for the written examination for the FAA private pilot's certificate. Consent of instructor is required. Not offered 1978-79.
AS 405. Reading and Conference. Credit hours to be arranged. Supervised individual studies, covering portions of the material of AS 121, 122, 123, AS 221, 222, 223, AS 321, 322, 323, or AS 421, 422, 423. Total credit earned in these sequences and in AS 405 may not exceed 24 credit hours. Consent of instructor is required.
AS 421, 422, 423. Aerospace Studies IV. 3 credit hours each term. The armed forces as an integral element of society; the broad ranges of civil-military relations and context in which overall defense policy is formulated. Not offered 1978-79.

# Academic Services <br> and <br> Special Studies 

## University Library

H. William Axford, Ph.D., Dean and University Librarian, Professor, University Library. A.B., 1950, Reed; M.A., 1958, Ph.D., 1969, Denver.

Eugene B. Barnes, Ph.D., Professor, University Library. Head Acquisition Librarian. B.A., 1941, M.A., 1943, Minnesota; Ph.D., 1947, Chicago.
George E. Bynon, M.S., Instructor, University Library ; Assistant Director, Instructional Media Center. B.A., 1973, Willamette ; M.S., 1975, Oregon College of Education.
Rodney E. Christensen, M.S., Assistant Professor, University Library, Social Science Section. B.S., 1956, M.S., 1957, Northern Illinois; M.S., 1967, Southern California.
Jane B. Durnell, M.L.S., Associate Professor, University Library; Coordinator of Library Instruction. B.A., 1938, Iowa ; M.L.S., 1968, Oregon.
James R. Dreyer, M.L., Instructor, University Library; Catalog Department. B.A., 1971, M.L., 1973, Washington.
Katherine G. Eaton, M.S., Assistant Professor, University Library; Head, Bureau of Governmental Research and Service Branch Library. B.A., 1944, Minnesota ; M.S., 1952, M.S., 1968, Oregon.
Joanne V. Halgren, M.L., Assistant Professor, University Library; Head, Interlibrary Loan Service, General Library. B.A., 1966, George Fox ; M.L., 1967, Washington.
J. Richard Heinzkill, M.L.S., Associate Professor, University Library ; Humanities Section, B.A., 1955, St. John's, Minn. ; M.L.S., 1964, Michigan.
Jane Yen-Cheng Hsu, B.A., Assistant Professor, University Library; Catalog Department ; Bibliographer, Orientalia Collection, B.A., 1946, Gingling Girls' School, Nanking.
Dennis R. Hyatt, J.D., Assistant Professor, University Library; Associate Law Librarian, B.A., 1969, Missouri ; J.D., 1972, M.L.L., 1974, Washington.
Holway R. Jones, M.A., Professor, University Library; Head, Social

Science Section; Professor of Librarianship. B.A., 1948, B.L.S., 1951, M.A., 1957, California.
Edward C. Kemp, M.L.S., Professor, University Library ; Acquisition Department. A.B., 1951, Harvard ; M.L.S., 1955, California.

Elaine A. Kemp, M.L.S., Instructor, University Library; Head, Catalog Department. B.A., 1962, M.L.S., 1970, Oregon.
Susan A. Kiefer, M.L.S., Instructor, University Library ; Law Library. B.A., 1970, Springfield ; M.L.S., 1973, Oregon.
William C. Leonard, M.S., Assistant Professor, University Library ; Head, Graphic Arts Service. B.S., 1965, M.S., 1970, Oregon.
Robert R. Lockard, M.A., M.A., Assistant Professor, University
Library ; Documents Section. B.A., 1952, Colorado State College of Education ; M.A., 1965, Denver ; M.A., 1970, Oregon.
Robin B. Lodezerick, M.L.S., Assistant Professor, University Library; Catalog Department. B.A., 1959, Brooklyn; M.L.S., 1961, Rutgers.

Richard J. Long, M.S., Senior
Instructor, University Library ; Social
Science Section. B.S., 1949,
Pennsylvania State ; M.S., 1966, Oregon.
Robert R. McCollough, M.A., M.S., Professor, University Library; Head, Humanities Section. B.A., 1940, M.A., 1942, Wyoming ; M.S., 1950, Columbia.
Reyburn R. McCready, M.A., Associate Professor, University Library; Head, Architecture and Allied Arts Branch Library. B.A., 1950, John Brown; M.A., 1961, Denver.
Deirdre D. Malarkey, M.A., M.L.S., Instructor, University Library; Head, Oregon Collection. B.A., 1957, Reed; M.L.S., 1968; M.A., 1974, Oregon.

Claire Meyer, M.A., Assistant Professor, University Library ; Head, Catalog Information Service. B.A., 1958, M.A., 1961, Minnesota.
Alan C. Miller, M.L.S., Instructor, University Library; Architecture and

Allied Arts Branch Library. B.A., 1964, Dartmouth; M.A., 1972, Trinity ; M.L.S., 1975, Oregon.
Kim Nelson, Ph.D., Assistant Professor, University Library; Director, Instructional Media Center.
B.A., B.A., 1955, M.A., 1963, Eastern Washington State College ; Ph.D., 1975, Oregon.
Anthony J. O'Connor, M.A., M.L.S., Instructor, University Library; Science Library. B.S., 1971, Siena; M.A., 1975, M.L.S., 1975, State University College, Geneseo, New York.
Kay Ollerenshaw, M.L.S., Instructor, University Library; Law Library. B.A., 1969, M.L.S., 1972, Oregon.

Christine Olson, M.L.S., Instructor, University Library ; Catalog Department. B.A., 1971, M.L.S., 1972, Oregon.
Barbara O'Neill, M.A., Instructor, University Library; Catalog Department. B.A., 1971, M.A., 1972, Wisconsin.
M. Cecily Orr, M.L.S., Instructor, University Library; Humanities Section. B.A., 1973, Vermont ; M.L.S., 1974, Indiana.
Guido A. Palandri, B.A., B.L.S., Associate Professor, University Library; Assistant Head, Catalog Department. B.A., 1949, Oregon ; B.L.S., 1954, California.

Virginia Parr, M.L.S., Instructor, University Library ; EducationPsychology Section. B.A., 1959, Oberlin; M.A., 1961, Michigan; M.L.S., 1973, Oregon.

Huibert Paul, M.L.S., Assistant Professor, University Library ; Acquisition Department. B.A., 1963, Sophia, Tokyo ; M.L.S., 1965, California.
K. Keith Richard, M.S., M.L.S., Assistant Professor, University Library; University Archivist, B.S., 1958, Oregon College of Education; M.S., 1964, M.L.S., 1971, Oregon.

Hozeard W. Robertson, M.S.L.S., Instructor, University Library; Catalog Department. B.A., 1970, Oregon ; M.S.L.S., 1975, Southern California.

Juan A. Sandoval, Jr., M.A.
Instructor, University Library; Minorities Program Librarian. B.A., 1969, Adams State, Colorado ; M.A., 1975, Denver.
Martin Schmitt, B.S., B.S., in L.S., Professor, University Library; Curator of Special Collections. B.S., 1938, B.S. in L.S., 1939, Illinois.

Lois M. Schreiner, M.L.S., Assistant Professor, University Library; Social Science Section. B.S., 1968, M.L.S., 1969, Oregon.
Rose Marie Service, M.A., M.A., Associate Professor, University Library; Head, Education-Psychology Section. A.B., 1944, Michigan State Normal, Ypsilanti ; M.A., 1950, M.A., 1955, Minnesota.
Marcia J. Sigler, M.L.S., Assistant Professor, University Library; Catalog Department. B.A., 1944, Ohio Wesleyan ; B.S., 1956, M.L.S., 1958, California.
Rodney A. Slade, M.L.S., Instructor, University Library; Interlibrary Loan Service. B.A., 1974, Texas Technical, M.L.S., 1976, Oregon.

Donald T. Smith, M.A., M.S., Professor, University Library; Assistant University Librarian. B.A., 1949, M.A., 1950, Wesleyan ; M.S., 1951, Columbia.
Edmund F. Soule, Ph.D., Associate Professor, University Library; Humanities Section ; Music Librarian. B.Mus., 1939, M.A., 1964, Pennsylvania; B.Mus., 1948, Yale; Ph.D., 1956, Eastman ; M.A., 1966, Denver. Richard H. Surles, Jr., J.D., Professor of Law, University Library; Law Librarian. B.A., 1963, Texas A \& M ; J.D., 1968, Houston ; M.L.L., 1969, Washington.
Edward P. Thatcher, M.A., Associate Professor, University Library ; Map Librarian. B.A., 1940, Swarthmore ; M.A., 1940, B.S. in L.S., 1952, Minnesota.
Paulette Thompson, M.L.S., Instructor, University Library; Education-Psychology Section. B.A., 1954, Augsburg; M.A., 1960, Minnesota ; M.L.S., 1972, Oregon.
Ryoko Toyama, M.S. in L.S., M.A., Instructor, University Library; Catalog Department; Bibliographer, Orientalia Collection. B.A., 1960, Niigata; M.S. in L.S., 1973, Catholic University of America; M.A., 1976, Oregon.
Luise E. Walker, A.M.L.S., M.S., Associate Professor, University Library ; Head, Science Library. A.B., 1951, Washington ; A.M.L.S., 1955,

Michigan; M.S., 1961, State University of New York, College of Forestry.
Kathleen M. Wiederholt, M.A.L.S., Instructor, University Library; Education-Psychology Section. B.A., 1961, Immaculate Heart (Calif.), M.A.L.S., 1970, Rosary (Ill.).

Christina Joy Woo, M.L.S., Instructor, University Library; Documents Section. A.B., 1972, California at Los Angeles ; M.L.S., 1975, California.

## Faculty Emeriti

Lois I. Baker, M.A., Law Librarian Emerita. B.A., 1927, M.A., 1932, Oregon; Cert., 1935, California; at Oregon since 1935.
Ella. S. Carrick, B.A., Senior Instructor in Library Administration Emerita, Senior Catalog Librarian Emerita. B.A., 1929, Oregon ; at Oregon since 1929.

Alfred Heilpern, M.L., Senior
Instructor in Library Administration Emeritus, Acquisition Librarian Emeritus. B.A., 1956, M.L., 1957, Washington; at Oregon since 1957.
Carl W. Hintz, Ph.D., Professor of Librarianship Emeritus, University Librarian Emeritus. A.B., 1932,
DePauw ; A.B.L.S., 1933, A.M.L.S., 1935. Michigan ; Ph.D., 1952, Chicago ; at Oregon since 1948.
Dreight H. Humphrey, M.A., Senior Instructor in Library Administration Emeritus, Catalog Librarian Emeritus. A.B., 1934, B.S. in L.S., 1939, M.A., 1963, Southern California; at Oregon since 1963.
Donald L. Hunter, B.S., Professor Emeritus, University Library. B.S., 1945, Nebraska; at Oregon since 1946.
Clarice E. Krieg, A.M., Professor Emerita, University Library. B.A., 1932, Iowa ; B.S. in L.S., 1933, A.M., 1935, Illinois ; at Oregon since 1941.
Corinne C. McNeir, M.S. in L.S., Associate Professor of Library Administration Emerita, Documents Librarian Emerita. B.A., 1930, Rice ; M.S. in L.S., 1957, Louisiana State ; at Oregon since 1961.
Margaret Markley, A.B., B.S. in L.S., Associate Professor of Library Administration Emerita, Senior Catalog Librarian Emerita. A.B., 1933, Southwest Missouri State; B.S. in L.S., 1941, Illinois; at Oregon since 1945.

Frances S. Nezusom, M.A., Architecture and Allied Arts Librarian Emerita. B.A., 1928, Oregon ; M.A., 1953, Denver; at Oregon since 1950.

The University of Oregon Library collections consist of about $1,300,000$ volumes in the General Library and 100,000 in the Kenneth Lucas Fenton Memorial Law Library. Other materials include international, federal, state, and local government documents, a substantial collection of microforms and audiovisual resources, and one and three-quarter million manuscripts. The Library's Instructional Media Center supports the instructional and research endeavors of the University's faculty with over a million dollar inventory of audio-visual hardware and nonprint software. Centralized purchasing, maintenance, and distribution of equipment and production support of audio, graphics, film rental and distribution, and multi-media presentations are among the Center's services. Faculty members offer assistance and consultation for instructional improvement. The University Archives are also a Library responsibility.

Library service is based on a broad subject division system: Social Science, Science and Humanities. Each division has its own reading and reference area. The book collections are on open stacks. The Science Division is housed in a separate library within the science complex. The Architecture and Allied Arts Branch Library is located in Lawrence Hall, and the Map Room is in Condon Hall.

The on-hand resources of the Library are augmented through membership in the Center for Research Libraries. Through this facility the Library has books and periodicals, and has access to The British Library's Lending Division. More immediately available are the collections of all Oregon State System of Higher Education libraries.

The Library is a member of the Association of Research Libraries. Special areas of strength for advanced studies include the American West, 20th Century American politics, particularly conservatism, children's literature, book and magazine illustration, American missions and missionaries, 17 th and 19 th century England, Oriental art.

The initial library building was constructed in 1937 by PWA labor and a loan from the Federal government that was repaid by the student building fee. Additions were constructed in 1950 and 1966. The handsome facade of the Main Library shows some influence of the Lombard Romanesque style. Notable fine arts work which embellish the building include the
fifteen stone heads by Edna Dunberg and Louise Utter Pritchard, the ornamental Hall memorial gates by O. B. Dawson, and the carved wooden panels by Arthur Clough.
Library Fines and Charges: The following regulations govern Library fines and charges in all Oregon State System of Higher Education libraries except the Health Sciences Library in Portland.
(1) A fine of 25 cents per day is charged for each overdue book, recording, or other Library material other than reserve books and material circulated by special permission (maximum, $\$ 10.00$ each item).
(2) The following fines are charged for violation of rules governing reserve books and material circulated by special permission : (a) for overdue books, 25 cents an hour or fraction thereof (maximum, $\$ 10.00$ each item), until the material is returned or reported lost (a maximum charge of $\$ 1.00$ an hour may be made in case of flagrant violation of the rules) ; (b) for failure to return books to proper department desk, 25 cents.
(3) Books needed for use in the Library are subject to recall at any time. A maximum fine of $\$ 1.00$ a day may be imposed for failure to return promptly.
(4) Borrowers losing Library materials are charged: (a) the replacement cost of the material, (b) the amount of fine incurred up to the time the material is reported missing (maximum, $\$ 10.00$ each item), and (c) a service charge of $\$ 3.00$ for each title. A charge to be determined by the librarian will be made for the repair or replacement of mutilated library materials.
(5) When a lost book, for which the borrower has been billed, is returned before a replacement has been ordered, a refund not exceeding the replacement cost may be made. In cases where a replacement has been ordered, any refunds to the borrower are at the discretion of the librarian.
(6) The State System libraries will honor each other's faculty and student identification cards for the purpose of borrowing library materials subject to the lending library's circulation policies. Any fines or charges accrued by faculty and students from other State System libraries will be submitted to the head librarian of their home institution for routine billing in accordance with the procedure of the home institution.

## University Library Instruction

Undergraduate Studies
The University Library offers the following service course for the convenience of undergraduates:
Lib 127. Use of the Library. 3 credit hours. Initial training in the use of library materials and services and in elements of bibliographic form. Designed to help undergraduate students use the library more effectively. Durnell
Upper-Division Courses Carrying Graduate Credit
Lib 407. Seminar. (g) Credit hours to be arranged.
Lib 441. History of the Book. (g) 3 credit hours. Development of the book in its various form from earliest times to the present ; origin and evolution of the alphabet and scripts; history of manuscript books; invention and spread of printing; production and distribution of printed books ; the relation of books to social conditions in the periods studied. Morrison.
Lib 581. Introduction to Archives.
(g) 3 credit hours. Historical development of archival practices and problems ; analysis of current trends
in federal, state, local, business, church, and university archives; archival processing, records management procedures, accession, arrangement, storage ; preservation, restoration, conservation ; research use of archival source materials. Richard.

## School of Librarianship

The School of Librarianship will close in August 1978. However, students who have completed all the requirements in the School of Librarianship, but need to complete courses outside the School for their M.L.S. degree, should consult with Dr. Perry Morrison in the University of Oregon Library
The program in certification for schoollibrary media has been transferred to the Department of Curriculum and Instruction in the College of Education.

## Graduate Library Studies

The state of Oregon does not have a program in Library Science but does cooperate with the Western Interstate Commission for Higher Education (WICHE) to provide educational opportunities in nearby states for residents of Oregon. For additional information, please consult the Office of Academic Advising, 107 Friendly Hall.


# Museum of Art 

Richard C. Paulin, M.A., Director, Musemm of Art, Assistant Professor of Art History. A.B., DePauw, 1951 ; M.A., Denver, 1958.

Tomny Lee Griffin, M.F.A., Chief Preparator, Museum of Art. B.A., California State, Stanislaus, 1973; M.F.A., Oregon, 1975.

Michael J. Whitenack, M.A.T., Supervisor of Visual Arts Resources, Museum of Art. B.F.A., Minnesota, 1970 ; M.A.T., Louisville, 1972.

The University of Oregon Museum of Art was built in 1930 with private funds provided by the generosity of friends throughout the state. The primary purpose of the museum is to promote an active and continuing interest in the visual arts-both past and presentamong students and faculty at the University, and the public. The adjoining courtyard of contemporary sculpture is dedicated to the memory of Prince Lucien Campbell, fourth president of this University, and construction was funded exclusively by his many friends and supporters.

The Murray Warner collection of Oriental Art was the nucleus of the museum's collections in the early 1930 s and included more than 6,000 objects. Represented are the cultures of China and Japan, as well as Cambodia, Mongolia and Russia, with the addition of American and British works of Oriental influence. More than 800 items, through gift and purchase, have been acquired from the Oriental and Greater Pacific Basin areas since the completion of the Warner bequest in 1940. Recent additions to these collections include Ghandaran and Indian sculpture, Chinese jade, Persian miniatures and ceramics, Syrian glass, and contemporary Japanese arts and crafts.

In addition, the museum has been actively and successfully collecting in the American, European, and Greater Pacific Basin areas, with particular emphasis on contemporary artists and craftsmen from the Pacific Northwest. A new major collection of African crafts is primarily from Ghana and Nigeria. Some 1,943 works are currently contained in a growing collection of Contemporary Pacific Northwest and American art. In 1970, a permanent gallery was devoted exclusively to this area. Included in this collection are the more than 500 works-both archival and major-
executed by the internationally renowned Northwest artist, Morris Graves, and more than 137 photographs of buildings throughout this nation designed by the internationally famous Northwest architect, Pietro Beluschi.

The museum serves as an extension service and as a resource center for students and faculty at the University in all academic disciplines, but primarily those in the School of Architecture and Allied Arts, and in Asian Studies. Art History and Art Education classes and seminars make frequent use of the muselim. The student study center allows faculty and students to viewupon request-small exhibitions of particular works; study carels for students, faculty, and visiting scholars are available. A museology course is offered annually by the Director, through the Department of Art History, and is available to seniors and graduate students, primarily from the School of Architecture and Allied Arts. Master candidates from the Department of Fine Arts exhibit their projects at the museum annually.

Exhibitions which are local, national, and international in scope are featured in the museum's extensive changing exhibitions program. All exhibitions and programs are funded privately, with assistance from the Friends of the Museum. The Friends of the Museum, organized in 1957, maintains an active statewide membership which helps to support such activities as Visual Arts Resources (an outreach program), the Docent Council, and the staffing of the Rental-Sales Gallery and the Rainbow Gift Shop. Membership in the Friends of the Museum is open to the public, with dues ranging from $\$ 5$ (student) to $\$ 250$ and higher (benefactor).

The Museum of Art maintains diverse exhibitions and programs providing for the varied needs and interests of the students, faculty, and the general public. Visitors are always welcome; no admission is charged. Attendance at the museum has grown from 8,200 visitors in 1953 (when the museum first opened to the public on a regular basis) to more than 100,000 this past year.

The Museum is closed on Mondays, and from the middle of August until the opening of the University's fall term, and during all University holidays.

The University maintains another museum which is open to the public, the Museum of Natural History in the Science Complex.

## Summer Session

Clarence W. Schminke, Ph.D., Director. B.A., 1950, M.A., 1954, Iowa State Teachers College; Pli.D., Iowa, 1960.

The Open Campus Concept. The summer program is open to anyone wanting to study in summer. Formal admission is required only if participation in a formal degree program is wanted. The only requirement is that a Registration Request card be filed at least three weeks in advance of registration day to allow preparation of a personalized registration packet. Two Registration Request cards are provided in each Summer Session Catalog for student convenience. Additional cards, if needed, may be obtained from the Summer Session Office or the Office of the Registrar. All summer courses offer bona-fide University credit.

Course Scheduling. More than thirty instructional units offer over 800 courses in addition to individual study and research opportunities. Eight-week courses comprise the majority of summer offerings. Shorter courses ranging from one to six weeks in length are available and begin at various times throughout the summer. Elevenweek courses are restricted to concentrated sequence courses in which three terms of credit may be earned during. one summer. A small number of workshops are usually available during the week preceding the opening date for Summer Session.

1979 Summer Session Calendar: June 11-15 are the dates for presession courses, with eight-week courses beginning June 19 and ending August 10 , and eleven-week courses extending from June 19 until August 31. June 18 is registration day for courses that begin June 19; students may also register at this time for courses that begin later in the Summer Session. Registration before June 18 is not possible, with the exception of courses in the presession week. Students may register for other courses (those starting after June 19 either on or before the first day of class. The Summer Time Schedule of Classes contains detailed registration procedures and will be available after May 15.

Summer Session Students: An estimated 7,000 students enroll for credit in sumner courses. About 50 per cent of this total are undergraduates. Approximately half the total enrollment is composed of students who were enrolled either fall, winter, or spring term. Teachers, students previously
admitted to a degree program, summeronly graduate degree candidates, and the once-only matriculators account for the other half of the summer student population. One-third of the Summer Session enrollees come from out of state since nonresident fees have traditionally been waived for summer. The difference in student body composition is evident when compared with the regular academic year, when 75 per cent are undergraduates and 25 per cent are graduates. Over 16,000 students are on campus during the regular year.

Summer Faculty: Some 450 faculty members and 200 graduate teaching fellows serve students during the summer. The summer teaching program is enriched with contributions of approximately 75 visiting faculty. The concentrated nature of the summer program allows frequent association with faculty members.
Prefreshman Program. A resident of Oregon who is unable to qualify for fall-term admission on the basis of a high-school record or either SAT or ACT test scores, has the opportunity to qualify for admission by doing acceptable work during Summer Session. Any student who wants to participate in the prefreshman program is advised to consult the Office of Admissions, 270 Oregon Hall, for complete information.

Summer Fees. Fee structures are subject to change, but the fees charged for Summer Session generally are the same as those charged during the preceding spring term. A notable exception is that nonresident fees are waived.

Housing. Dormitory facilities during the summer are abundant, making reservations prior to registration unnecessary. Double rooms are available for married couples without children. Although a few vacanies may become available, the student-family housing projects are usually occupied during the summer by year-round students. Rental houses, apartments, and boarding houses are located near the campus. Complete housing information is in the Summer Session Catalog. Inquiries about University housing should be directed to the Housing Office in Walton Hall.

Financial Aid. The University has loans, and part-time work available, although on a relatively restricted basis during the summer. Financial aid is available in the summer only for students who were enrolled at the University the previous Spring term or have been admitted and plan to attend
the Fall term. A student must be in good academic standing in order to receive financial aid. The student must have files complete in the Office of Student Financial Aid, Oregon Hall, prior to April 1, to be considered for any of the various types of financial aid.
Summer Session Publications. The comprehensive Sumpuer Session Catalog will be available in March 1979, and the Summer Time Schedule of Classes. after May 15 (for on-campus distribution only). Various special programs are highlighted in separate circulars.

For More Information: Further information about the Summer Session may be obtained from the Summer Session Catalog or by writing the Summer Session Office, Room 64 Prince Lucien Campbell, University of Oregon, Eugene, Oregon 97403, or by calling (503) 686-3475.

## Computing Center

Wayne Wiitanen, Ph.D., Interim Director of University Computing. Gordon P. Ashby, M.B.A., Managing Director.
Norman L. Beck, M.S., Senior Systems Programmer.
Kathleen M. Beyer, M.A., Senior Applications Programmer.
W. Terry Beyer, Ph.D., Senior

Systems Programmer.
James A. Calvin, B.S., Applications Programmer.
Paul T. Conte, M.S., Senior
Applications Programmer.
Richard W. Haller, Ph.D., Senior Research Consultant.
Joanne R. Hugi, M.S., User Services
Director.
Richard M. Millhollin, M.S., Facilities
Manager.
Barbara Nash, M.S., Systems
Programmer.
Gus P. Pusateri, B.S., Administrative Officer.
Janet Swift, B.S., Applications Programmer.
David A. Thompson, B.S., Systems Programming Supervisor.
David B. Ulrich, B.A., Programmer Analyst.
The Computing Center provides computing facilities and services for the University, serving instructional, research, and administrative needs. Facilities include an IBM system $360 / 50 \mathrm{H}$, used for batch processing, a PDP-10/50 computer, used primarily for time-sharing, and peripheral data
processing equipment. Programming systems and languages available include Fortran, FLECS, WATFIV, PL/1, COBOL, BASIC, Assemblers for 360 and PDP-10, SIMSCRIPT, GPSS, SPSS, BMD, LISP, SNOBOL, and ALGOL. A documents rooms includes a library of manuals and documentation on programs and equipment. Applied programming and data entry services are available, and the staff provides consulting assistance and tutorials on elementary and advanced topics concerning the use of computers.

The Computing Center is a University service unit, separately administered from the Department of Computer Science. The latter is the academic division which offers courses in theory and practice and the pursuit of baccalaureate and advanced degrees.

# Continuing Education 

Kenneth R. Thomas, Director. B.A., College of Idaho, 1952 ; M.A., Oregon, 1963.

The continuing education program is primarily an extension of University resources to persons not enrolled as students on campus. The program includes conferences, cultural offerings, special educational service projects, and courses offered for credit by special arrangement.

Continuing education programs reach many communities in Oregon and are developed to meet varying needs. They are designed to help people learn to do their jobs well, to lead useful lives, and to make good use of leisure time.

Special educational programs are provided in outlying areas of the state by means of correspondence study and educational broadcasts.

Detailed information may be obtained from the University of Oregon Office of Continuing Education, 1479 Moss Street, University of Oregon.

## Broadcast Services and Televised Instruction

 John R. Shepherd, Ph.D., Director. (Resignation effective, August 31, 1978.)Ronald E. Sherriffs, Ph.D., Associate Director.
William B. Willingham, M.A., Operations Manager.
Michael K. Moskovitz, B.S., Broadcast Production Coordinator.
Katie L. Sloan, M.L.S., Program
Director, Station KWAX-FM.
David R. Primuth, B.S., Director of Operations and Developinent, Station KWAX-FM.
Frank D. Murphy, Chief Engineer. James A. Lacock, Engineer.

The Division of Broadcast Services was established in July of 1964 to serve the entire academic community of the University of Oregon. The Division operates station KWAX-FM, a 20 -thousand-watt stereophonic radio station, on the air from 6:00 a.m. to 2:00 a.m. daily, at 91.1 Mhz. KWAXFM is a member of the National Public Radio network.

KWAX-FM has a full-time staff which includes a General Manager, an Operations and Development Director, a Production Director, a Program Music Director, and Chief Engineer.

The format features music and fine arts, with block programs of different types and periods of music. The Station offers various programs from National Public Radio.

KWAX produces the Beall Concert Series in cooperation with the School of Music at the University. This weekly series features faculty and guest artist performances, taped at the School. The Station has a full stereo production facility and produces programs for both OEPBS and NPR.

The Station offers students an opportunity for experience and employment in broadcasting.

KWAX-FM publishes a monthly program guide that is supported by listeners' subscriptions. For more information call the station at 686-4245.
Television: In addition to the radio activities, the Division is extensively involved in television production, producing programs for the statewide Oregon Educational and Public Broadcasting System, for community distribution via Teleprompter's cable station, KOZY, and for campus use through PL-3TV, the on-campus closed circuit television system.

Television equipment now available to the campus includes two image orthicon camera chains, one studio color camera chain, two vidicon camera units, six videotape machines, including one broadcast model Ampex 1100 recorder, a film and slide chain, and two portable videotape recorders.

Related to these basic units is the production equipment such as switcher, monitors, transmitters (including a microwave link to OEPBS stations KOAC-TV and KOAP-TV), amplifiers, monitors, and lights.
Equipment maintenance. The Division has maintenance responsibility for television equipment housed in the various satellite facilities throughout the campus, and will undertake the repair of such equipment within the limits imposed by staff and budget limitations. Those bringing equipment for repair should expect to bear the cost of necessary parts and materials.
Distribution Equipment. Television programming is distributed via PL3 TV , the campus closed-circuit television system. Twenty-six classrooms are wired for television service. These will accommodate 1,315 students. In addition, thirty-four dormitory dining room areas are wired to accommodate a total of 2,700 students.
Videotape Library. One important function of the Division is to act as a resource for the acquisition and
development of television materials suitable for classroom instruction and curricular enrichment. Important lectures, laboratory demonstrations, guest speakers, and other special events may be videotaped and retained for future use.
Instructional Television. The Division of Broadcast Services offers faculty, staff, and students an opportunity to use television as a teaching, research, and administrative tool. The staff of the Division will offer experienced assistance in the preparation, development and production of instructional television material for any agency of the University. Anyone interested in exploring the possible application of television as a supplement to classroom instruction is invited to arrange for a consultation with the Division of Broadcast Services.

The activities of the Division are funded in the general budget of the University, as well as with grants from the Corporation for Public Broadcasting and the Station Support Program of voluntary giving administered through the Development Fund. There is no direct charge for most of the services provided.

# Labor Education and Research Center 

Emory F. Via, Ph.D., Director. B.A., Emory, 1946; M.A., 1956, Ph.D., 1964, Chicago.

Steven Deutsch, Acting Director, 1977-78; Professor of Sociology ; B.A., Oberlin, 1958; M.A., 1959, Ph.D., 1964, Michigan State.

James J. Gallagher, Associate Professor of Labor Education. B.A., 1969, California, Berkeley.

Scott Tobey, M.A., Visiting Instructor. B.A., Michigan, 1972 ; M.A., Michigan State, 1976.

The Labor Education and Research Center is the University's newest center and the first publicly funded labor education and research program in the state. The only such center west of Denver and north of Berkeley, the University's program is part of a trend toward establishing such centers on the campuses of major universities.
The Labor Center was established by the Oregon Legislative Assembly, acting on the recommendation of the State Board of Higher Education, in July 1977, to serve the needs of working men and women in Oregon. Based on the model of agricultural extension services, the Center conducts programs throughout the state.

Close contact with labor's needs is maintained through the Center's advisory committee of 14 representatives of statewide and national unions and employee associations. The committee meets monthly to advise the Center on all aspects of its operation.
Short courses, workshops, seminars, and conferences are offered by the Center throughout the state. Subjects include basic unionism (labor history, arbitration, mediation, and lobbying) ; contract negotiations for public sector unions; grievance handling and arbitration in the schools; research in the local union to determine members' positions before negotiation ; the labor press; labor and the commercial press; women and unionism ; workers' compensation ; occupational health and safety; labor law in the construction trades ; automation and its impact; affirmative action ; steward training; and equal opportunity hiring. The Center also acts as host for residential union leadership summer schools at the University.

A degree in labor studies is not yet available; a labor studies program for full-time students and a degree program for working people will be offered at a later time. Meanwhile, academic credit for Labor Education Center courses may be arranged through the Division of Continuing Education and the Summer Session Office.

Research is a critical part of the role of the Labor Education and Research Center to generate knowledge about the problems of working people. Research programs are shaped in discussions with unions, employee associations and workers themselves. Three areas are expected to be paramount: the problems of the economy as they affect working people,
such as unemployment, job security and job creation; aspects of working life, such as occupational health and safety, affirmative action and equal opportunity, and technological change ; and special sectors of the labor force such as women and minorities, public employees, and members of particular occupations.

The Center is a member of the University and College Labor Education Association and the Pacific Northwest Labor History Association.

Inquiries about the Labor Education and Research Center's program may be addressed to 154 Prince Lucien Campbell Hall, University of Oregon, Eugene, Oregon 97403. Telephone (503) 686-5054.


# University <br> Administrative <br> <br> Services 

 <br> <br> Services}

Office of the President
William Boyd, Ph.D., President.
John E. Lallas, Ed.D., Executive Dean
Myra Maurice Willard, B.A., Director, Affirmative Action.
David B. Frohnmayer, J.D., Assistant for Legal Affairs.

Office of the Vice-President for
Academic Affairs and Provost
Paul Olum, Ph.D., Vice-President for Academic Affairs and Provost.
Marshall D. Wattles, Ph.D., Vice-
Provost for Academic Administration.
Robert C. Albrecht, Ph.D., Vice-
Provost for Academic Planning and Resources.
Henry Osibov, D.Ed., Assistant for Faculty Personnel.

Office of the Vice-President for
Administration and Finance
N. Ray Hawk, D.Ed., Vice-President for Administration and Finance.
Ralph C. Sunderland, B.S., Assistant and Director of Management and Budget.
David J. Cunningham, M.A., Acting Assistant for Administration.

Athletics
John Caine, Ed.D., Director of Men's Athletics.
Becky L. Sisley, Ed.D., Director of Women's Athletics.

Business Affairs
W. N. McLaughlin, B.S., C.P.A., Director.
Donald L. Thomas, B.S., C.P.A., Assistant Business Manager. Harry Cronan. B.S., Auditor.
Rod Bow'man, B.A., Data Systems Coordinator.
Kerry Kelly, Disbursement Auditor.
Carole Parkinson, B.S., Distribution
Center.
Donald C. Hozcard, B.S., P.A., Financial Research.
Walter Parsons, Printing Department. Dorothy Grover, Telephone Exchange.

## Campus Security

Oakley Glenn, Director.
Linda Truitt, Parking.

Richard D. Tanner, Security
Supervisor.
Betty Pyle, Key Issuance.
John Parsons, Police.

## Physical Plant

Harold C. Babcock, M.S. Director.
Leland Lorange, B.S., Assistant Director, Physical Plant.
Jon Kahananui, B.Arch., Assistant Director, Architecture.
J. David Rowe, B.S., Director, University Planning.
William Norwood, B.S., Superintendent, Heat and Power Plant.

Office of the Vice-President for Public Affairs Curtis R. Simic, B.S., Vice-President for Public Affairs.

Alumni Association
Lois Black McCarty, Director.

## Development Fund

Carl O. Fisher, Assistant to the President.
Clifton C. Cole, B.S., Acting Director.
Hope Hughes Pressman, M.A., Associate Director.

University Relations
Muriel Kappeler Jackson, M.S., Director.
Mary Alden Hudzikiezrics, M.S., Director of Community Services. Robert K. Bruce, Ed.S., Director of the News Bureau.
George Beltran, M.S., Director of Ptiblications.
Catherine Miller Lauris, B.A., Editor.
Barbara Edwards, M.A., Editor,
Alumni Publications.

## Faculty Emeriti

George N. Belknap, M.A., University Editor Emeritus with the Rank of Professor. At Oregon since 1934.
J. Spencer Carlson, M.A., University Registrar Emeritus with the Rank of Professor. At Oregon since 1947.
Leonard J. Casanova, Pli.B., Director Emeritus of Department of Athletics with the Rank of Professor. At Oregon since 1951.
Robert D. Clark, Ph.D., University President Emeritus with the Rank of

Professor. At Oregon 1943-1964 and since 1969.
Clifford L. Constance, M.A., Registrar Emeritus with the Rank of Professor.
At Oregon since 1931.
Donald M. DuShane, M.A., Dean
Emeritus of Students with the Rank of Professor. At Oregon since 1948.
Leo A. Harris, M.A., Director Emeritus of the Department of Athletics with the Rank of Professor. At Oregon since 1947.
J. Orville Lindstrom, B.S., Director

Emeritus of Fiscal Affairs with the
Rank of Professor. At Oregon since 1932.

Josephine Stofiel Moore, B.S., Director
Emerita of the News Bureau with the Rank of Assistant Professor. At Oregon since 1946.

## University History

Heritage. The history of the University of Oregon as a state institution dates from October 19, 1872, when the University was established by an act of the Oregon Legislature, although it was four years later, on October 16, 1876, that the institution formally opened its doors for instruction to 177 students.

Founding of the University grew out of the grant of two townships of land
"to aid in the establishment of a university in the territory of Oregon." This grant was provided within the Congressional "Donation Act" of September 27, 1850. As the territory then comprised the whole of the old Oregon Country and it was specified that one of the two townships selected was to be located north of the Columbia River, the grant in this respect was modified on July 17, 1854, reserving two towinships each for the then newly created Washington territory and Oregon territory. This was confirmed February 14, 1859, when the Act of Congress admitting Oregon into the Union provided for a grant of seventytwo sections of land for the establishment and support of a state university.
The state Legislature by an act of June 3 , 1859, committed the people of Oregon to the application of the proceeds from the grant "to the use and support of a state university."

The pioneer settlement of the then
very remote Oregon proceeded slowly so the accumulation of funds from the sale of these university lands was not rapid. The population of Oregon in 1850 (including the entire Oregon Country was only 13,294 . In 1860 , the European population of the state was 52,465 and in 1870, 90,923. Already five denominational colleges were established in the state in 1860 , and the United States census of 1870 reports twenty as the number of "classical, professional and technical" institutions ("not public") in the state. The creation of a state university had naturally been deferred.

The Legislature on October 19, 1872, however, passed an act "to create, organize and locate the University of the State of Oregon" after a fund of $\$ 31,635$ had accumulated from the sales of university lands. Eugene was chosen as the site for the University after the Lane County delegation offered to provide a building and campus worth $\$ 50,000$. The Union University association of Eugene, the organization promoting the school, was given two years by the Legislature in which to construct this building.

But, unfortunately, the genesis of the University and the economic troubles of 1873 came at about the same time and the University progenitors ran into difficulties when strong opposition developed to the county tax which was authorized by the Legislature to raise $\$ 30,000$ of the $\$ 50,000$. The levy was eventually rescinded. However, construction on the first University building, Deady Hall, began in May, 1873. After an intense struggle to keep the enterprise alive and a two-year extension of time for completion had been granted, the conditions specified as required to be met in creating the University were declared fulfilled and the site and building were accepted by the state July 28, 1876, and classrooms opened that fall.

The first University courses offered classical and literary subjects and some scientific studies. The institution's growth necessitated broadening the curriculum to include scientific and professional courses. The first class was graduated in June 1878.
The Presidents. Since its founding, the University of Oregon has been served by 17 presidents: John Wesley Johnson, 1876-1893 (A.B. and A.M., Yale, 1865 ) ; John Straub, acting president, 1893 (M.A., Mercerburg, 1879) ; Charles Hiram Chapman, 1893-1899 (Ph.D., Johns Hopkins, 1890) ; Frank Strong, 1899-1902 (Ph.D., Yale, 1897) ; Prince Lucien Càmpbell, 1902-

1925 (A.B., Harvard, 1886) ; Arnold Bennett Hall, 1926-1932 (J.D., Chicago, 1907, LL.D., Franklin, 1924) ; Clarence Valentine Boyer, 1934-1938 (J.D., Pittsburgh, 1904, Ph.D., Princeton, 1911) ; Donald Milton Erb, 19381943 (Ph.D., Harvard, 1930) ; Orlando John Hollis, acting president, 19441945 (J.D., 1928, Oregon) ; Harry K. Newburn, 1945-1953 (Ph.D., Iowa, 1933) ; Victor Pierpont Morris, acting president, 1953-1954 (Ph.D., Columbia, 1930) ; O. Meredith Wilson, 1954-1960 (Ph.D., California at Berkeley, 1943) ; William C. Jones, acting president, 1960-1961 (Ph.D., Minnesota, 1940) ; Arthur S. Flemming, 1961-1968 (LL.D., George Washington, 1933) ; Charles Ellicott Johnson, acting president, 1968-1969 (Ph.D., Minnesota, 1952) ; Robert D. Clark, 1969-1975 (Ph.D., University of Southern California, 1946) ; William Beaty Boyd, since 1975 (Ph.D., Pennsylvania, 1954).

## Affirmative Action

Equal Opportunity. The University of Oregon, a member of the Oregon State System of Higher Education, prohibts discrimination based on race, color, religion, sex, age, handicap, marital status, or national origin. Discrimination against Vietnam Era veterans is also prohibited. This policy implements various federal and state laws, Executive Orders, Title IX and its regulations, and applies to employment, admission, education, and facilities. Through an Affirmative Action Program, the University is pledged to actively seek new and creative ways to combat discrimination ; to insure nondiscrimination is a pervasive part of the University environment. Direct related inquiries to Myra T. Willard, Director, Affirmative Action Office, 472 Oregon Hall, University of Oregon (telephone [503] 686-3123).
Assistance for Handicapped. It is the policy of the University of Oregon that no handicapped individual shall, solely by reason of his or her physical handicap, be excluded from participation, be denied the benefit of or be subjected to discrimination under any program or activity offered by the University.

The Office of Student Services is available to assist handicapped students in obtaining required program accommodations to enable them to complete their program of studies. Such accommodation, in accordance with Section 504 of the Vocational Rehabilitation Act of 1973, may consist of such auxiliary aids as readers, audio-visual aids, and sign language interpreters;
modification to classroom location for physical access; modification to classroom techniques and practices to accommodate visual or auditory limitations, such as special seating arrangements or provision of lecture notes; modification to allow accessibility of the degree or program objective, such as substitution or waiver of some degree requirement. Consult the Office of Student Services, Room 164 Oregon Hall, for further information or assistance (telephone [503] 686-3211).

## The University Today

General guidelines-goals and objec-tives-for the several institutions of the Oregon State System of Higher Education were adopted by the Oregon State Board of Higher Education in 1964. The Board reviewed the guidelines in subsequent years and reaffirmed them in 1973. Guidelines for the University of Oregon are summarized in part below.

The University is guided by the principle that it shall make available educational opportunities of high quality which can help students acquire knowledge, skills, and wisdom for (1) personal development and enrichment, including emphasis on the arts, letters, and other expressions of the human spirit, (2) an understanding of science and technology; (3) an understanding of other peoples and cultures as well as our own; and (4) responsible participation in a dewocratic society.

Fundamental to the success of the University's educational mission is preserving and encouraging an atmosphere of intellectual freedom. Without the freedom to seek information and knowledge in the library, in the classroom, in the laboratory, in field studies, in the words of campus speakers, the objectives of a University cannot be achieved.

The University is dedicated to making available opportunities for professional and graduate education in areas appropriate to its mission, which will enable students to render effective service in a rapidly changing society; and to help meet the needs of the state and nation for teachers at all levels of education as well as providing for graduate preparation in business, government, science, the professions, and other areas of human encleavor.

The University is committed to the advancement of knowledge through encouragement and development of scholarship, research, and artistic and professional achievements.

The University is committed to provide service to the state of Oregon
and to make available the results of research and study in the solution of local, state, and national problems.

Currently, 16,701 students are enrolled, including 4,080 graduate students. The University has 994 fulltime faculty members engaged in teaching and research. The current curriculum covers a broad range of knowledge : thirty-five departments and special programs in the arts and and sciences; nine professional schools and colleges ; twelve research bureaus, institutes, and centers ; and a graduate division.
Accreditation. The University of Oregon was named to membership in the Association of American Universities in 1969. The University has full accreditation from the Northwest Association of Schools and Colleges. Professional schools and colleges have approval from the appropriate accrediting organization: American Assembly of College Schools of Business, American Institute of Planners, American Council on Education for Journalism, American Library Association, American Psychological Association, Association of American Law Schools, Foundation for Interior Design and Research, National Architectural Accrediting Board, National Association of Schools of Music, National Athletic Trainers Association, National Council for the Accreditation of Teacher Education, National Council of Instruction in Landscape Architecture, National Council on Social Work Education, and Teachers Standards and Practices Commission of Oregon.
Income. Funds for the support of higher education in Oregon are derived primarily from state appropriations for the operation of institutions, specified sums from the national government assigned for definite purposes by Congressional acts, income from student tuition and other fees, and such sources as gifts, grants, sales, and service charges. The current annual budget for the University of Oregon is \$76,281,971.
The Community. The University of Oregon main campus is in Eugene, a city of 100,450 people, located at the southern tip of the Willamette Valley. The city is a center for government, farming, the lumber industry, transportation, health and medical services, education, music, and theater. There are numerous parks and public gardens, and facilities for sports and outdoor recreation. Although the community is the state's second largest metropolitan area, it retains much of the atmosphere of a small town.

Both campus and community sponsor and patronize a wide variety of lectures, art exhibits, concerts, theatrical productions, and sports events. Local education, recreation, shopping, and medical care are excellent.
Eugene is an hour's drive from either the Pacific Ocean or the Cascade Mountains. Because of its location, its unspoiled natural environment, and mild year-round climate, outdoor activities such as camping, hiking, fishing, boating, and skiing are extremely popular.
Outside the metropolitan area, the county is pleasantly rural. The evergreen forests help make it the lumber capital of the United States; agriculture ranks as the second industry. Eugene is the county seat for Lane County, and the site for a number of federal, state, and local governmental agencies.
University students are able to gain academic credit, practical experience, and income by working in local governmental offices, businesses, social agencies, parks, and schools. Faculty and staff members serve the community in many advisory and volunteer roles, and are members of such bodies as the city council, school boards, and various public and private boards and commissions. Students may and do take part in all aspects of community life.

## Administration

The University has several administrative offices whose staff are responsible for some aspect of student life. Directors of these services report to the president or to one of the vice-presidents. A student may have occasional or frequent association with one or more of these services. Others will seldom come to student attention. All supplement the academic life with necessary services and functions.

The fundamental structure for the government of the University of Oregon was established on October 28, 1876, in a legislative statute commonly known as the University Charter. It specified that the president and the professors constituted the University faculty, and that this faculty should "have the immediate government" of the institution. This established a tradition of consultative and mutual responsibility that has continued to the present time. For example, basic academic requirements and many of the academic practices of the University are established at the monthly open faculty assemblies, in which student representation now participates.

Among the president's closest advisers on University policies are the
members of the Faculty Advisory Council, who are elected by the faculty and who, in regular meetings with the president, provide faculty opinion and counsel on University affairs.

In addition to the Faculty Advisory Council, the president is advised by the Council of Deans, by faculty and administrative committees composed of Deans, by faculty and administrative committees composed of both faculty and students, by the officers of the Associated Students of the University of Oregon (ASUO), and several other groups. The latter include citizens' committees, and the Development Fund Board of Directors.

The Office of the Vice-President for Academic Affairs and Provost has overall responsibility for academic planning and budgeting, curriculum development, and faculty personnel administration for all the University's professional schools and colleges, the College of Arts and Sciences, and the Graduate School. Other academic and service programs within the jurisdiction of this office are the University Library, Broadcast Services, the Summer Session, and Continuing Education. The office also has overall responsibility for certain of the University's student services including admissions, registration, financial aids, Erb Memorial Union, and student personnel services. The courses of instruction, and the details of service offered by these divisions are described elsewhere in this catalog.

The Office of the Vice-President for Administration and Finance is responsible for general administrative and fiscal affairs of the University primarily in areas other than those directly associated with curricula and faculty. Coming within the jurisdiction of this office are the administrative division for business affairs, classified personnel, University computing, environmental health and safety programs, intercollegiate athletics, the Musem of Art, and the physical plant. In addition, certain of the University's student services report to this office including housing, security, and health services. Details concerning the function of these divisions appear elsewhere in this catalog.

The Office of the Vice-President for Public Affairs, is responsible for the major portion of University activities performed in relationship to the public. Within the jurisdiction of this office are the development fund, the alumni organizations, University relations, and a variety of publishing activities. Details concerning the functions of
these units appear elsewhere in this catalog.

## Alumni Association

Anyone who has ever attended the University of Oregon is a member of one of the largest clubs in the state: the Alumni Association. The Association, which had 89,000 members in the spring of 1978, gives alumni an opportunity to keep in touch with their alma mater and each other, for their own benefit and the benefit of the University.

Alumni are the best friends a university has. Alumni support is crucial to the fulfillment of the University's mission. Through the UO Alumni Association, alumni may contribute to that mission.

The major programs now being carried on by the Alumni Association include:
establishment and maintenance of alumni groups throughout the country ; cooperating in publishing the alumni publications, Old Oregon and Oregon Today, which are mailed to all alumni ; maintenance of accurate alumni records;
foreign travel prograns and tours; vacation/learning opportunities for continuing education;
support services for special alumni and friends groups, such as Law alumni, Business alumni, and the State Association of UO Women, which has been providing loan funds and scholarships for students since 1907 ;
speakers available to community groups;
annual class reunions;
commencement receptions;
career fairs for students.
The Alumni programs are administered through the Alumni Office in Susan Campbell Hall on the University of Oregon campus. The governing body of the Alumni Association is the Board of Directors, as of May 1978:
John G. (Bud) Morris, Portland (president)
Keith Barker, Portland (vicepresident)
Larry Campbell, Eugene (treasurer)
Lois Black McCarty, Eugene (secretary)
Norma Jones Barnhisel, Corvallis
Mike DeVore, Medford
Ancer Haggerty, Portland
Mike Hillis, Bend
Mary Jane Rud Holland, Eugene
Peg Larpenteur Hoyt, Eugene

William Hutchison, Portland
Richard Imwalle, Los Angeles
Peter King, Seattle
William Kirby, Enterprise
Robert Kraus, Lake Oswego
Dave Mackin, San Mateo
Stoddard Malarkey, Jr., Eugene
Roger Martin, Portland
Joan Palmer Perkins, Lake Oswego
Dick Portwood, Salem
Quiney Powers, Eugene
James Roberts, Spokane
George Stadelman, The Dalles

## Athletics

Athletics at the University of Oregon are an integral part of the institution's educational programs. Opportunity to participate in athletics is offered to students of both sexes at every level of experience and skill. Through its Affirmative Action program, the University is committed to a program of athletics which will give equal opportunity to all student athletes.

Men's athletics include a comprehensive program that is earning local, national, and world recognition. Teams are fielded in ten major sports-football, basketball, baseball, wrestling, gymnastics, swimming, golf, tennis, track and field, and cross-country.

The University of Oregon has a rich athletic heritage that includes four national track and field championships, four national cross-country championships, and the first-ever NCAA basketball championship.

Numerous Oregon teams have won conference and regional championships, and many Oregon athletes have won individual national titles and participated in the Olympic Games, World Games, and other major competitions.

Oregon belongs to the Pacific-10 Conference. Other member institutions are Arizona State, Arizona, UCLA, USC, Stanford, California, Oregon State, Washington, and Washington State. Pac-10 schools have captured far more national titles than any other conference in the nation.

The success of Oregon sports has made Eugene and the University of Oregon an attractive site for national championships. Oregon has been host to national track, gymnastics, wrestling, and golf championships, the 1972 and 1976 Olympic Track and Field Trials; and Eugene is hailed as the track and field capital of the world. In 1978, NCAA meets to be held in Eugene include track, golf, gymnastics, and the first round in basketball.

Women's Intercollegiate Athletics are administered within the Department of Intercollegiate Athletics. All coaches are qualified faculty members. The Department also employs assistant coaches, athletic trainers, and secretarial personnel. The dedication, qualifications, and enthusiasm of the staff enable the University of Oregon to offer a sound educational experience in a quality competitive program. The program is designed to provide opportunities for women to develop their talents at a notable level of excellence. Teams are fielded in nine sports: basketball, cross-country, field hockey, gymnastics, softball, swimming and diving, track and field, and volleyball.

Oregon offers a comprehensive, quality sports program for women in the Northwest. Teams or individuals have participated in 26 national championships in the past four years. Grants-inaid for outstanding women athletes at Oregon are available.

More than 200 women participate in the program. The Women's Sports Council serves as the voice of the women student-athletes on campus; it is composed of two student representatives from each competitive team. The Council meets three times per term to act on concerns of the athletes and sponsors projects which benefit all participants within the program.

The University of Oregon belongs to the Northwest College Women's Sports Association which was founded in 1966. This organization is the regional structure governing athletic competition for women among its 73 member institutions. The NCWSA sanctions regional championships in which Oregon teams compete.

The University of Oregon is also a member of the Association for Intercollegiate Athletics for Women and thus competes in regional qualifying events which lead to national championships. The AIAW, founded in 1971, has mushroomed into an 823-member organization sponsoring twelve different championships. Plans are projected to continue participation in the championships as teams qualify.

## Business Affairs

The Business Affairs division is responsible for receiving and disbursing all University funds. In addition to the necessary internal functions for processing financial data, auditing records, contracts, and similar business matters, the division supervises three service divisions : the University Printing Department, the Distribution Center, and the Telephone Exchange.

Services provided for students include a centralized billing for all charges from various University departments; administration or deferred tuition payments, billing and collection for all loans, service charges, fines, telephone bills, general deposits, housing deposits and charges, student insurance; administration of all student payroll transactions; and preparation of sailing permits for international students leaving the United States (please see also page 9 ).

## Campus Security

This office is responsible for the general safety of the campus on a twenty-four hour basis. Campus parking permits for staff and students are available here. The office is in Straub Hall on Fifteenth Avenue.

## Development Fund

The University of Oregon Development Fund is an independent, nonprofit corporation chartered under Oregon Law in 1957 by the Oregon Legislature. The primary purpose of the Development Fund is to provide opportunity for private donors to support the educational programs of the University on a basis of need and priority. Responsibility for administering the Development Fund rests in the hands of the Board of Directors, which consists of twenty-five distinguished citizens from Oregon, Washington, and California together with ex officio members representing faculty, students, parents, schools, and agencies.

Among fund-raising programs conducted by the Development Fund are the Annual Alumni Fund, which seeks unrestricted gifts, a Deferred Gifts progrann, a Corporate Gifts program, and a Foundation Gifts program. Also continuing into 1978 is the Second Century Fund campaign seeking capital gifts for the University.

Information concerning the program and the University needs for which private support is essential may be obtained from the director and his staff. The office is located in Room 111, Susan Campbell Hall. The Fund also maintains a Portland office in the Morgan Building, 720 SW Washington.

## Physical Plant

Campus buildings and grounds are maintained by the University's Physical Plant. A landscape maintenance crew cares for the lawn, trees, and shrubs on more than 250 acres of campus. A team of licensed tradesmen in cabinetry,
carpentry, painting, electrical work, and plumbing care for the campus buildings, which encompass some three million square feet of space. Also administered by the Physical Plant is the heating and power plant which provides steam heat to most campus buildings, and which supplies sixty per cent of the University's electrical needs. Responsible for the proper functional and esthetic use of the University's facilities are the professional members of the Physical Plant's planning and architectural staffs. These include the campus planner, the space analyst, and the University architect. The Physical Plant maintains two University facilities in other parts of the state, the Marine Biology Station at Charleston on the Oregon coast, and Pine Mountain Observatory near Bend in central Oregon. The Physical Plant employs about 220 full-time employees and seventy-five seasonal and part-time employees, of whom fifty are students.

## University Relations

This office coordinates the University's communications and interaction with the public, both on and off campus. The Office prepares general information materials for public distribution; handles all arrangements for commencement exercises ; assists in arranging public visits and tours, meetings and conferences on campus; organizes
Parents' Weekend and other on-campus events; provides University speakers on request; and maintains liaison with the University of Oregon Mothers and Dads Clubs. The Office of University Relations is also responsible for supervision of three production units:

New's Bureau: This unit writes and distributes news stories to newspapers, periodicals, and radio and television stations concerning University programs and personnel. It also develops information in response to inquiries from the news media and assists news representatives to prepare articles and interviews about University affairs. Oregon Week, the weekly faculty and staff news bulletin, is produced by this department.

Publications Office: This unit produces the University's general catalog and other catalogs, the facultystaff directory, and certain other University-wide publications. It also provides consultation and assistance in the design, writing, editing, and final preparation of departmental publications which are to be printed by the University Printing Department. All University printing orders, except for simple duplicating, must be approved
by the Publications Office before being submitted to the Printing Department. Alumni Publications: This unit produces two publications which alternate, one appearing every six weeks-the quarterly alumni magazine, Old Oregon, and a quarterly eight-page tabloid, Oregon Today, Both publications are distributed to 56,000 alumni and friends of the University.

## Campus and Buildings

The 250 -acre tree-shaded campus includes 25 large classroom buildings, a great central library and several specialized libraries, a student union, health center, clinics and laboratories, administration and service buildings, six large dormitories, and athletic facilities for men and women.

The following descriptions, arranged alphabetically, list the principal structures and their purposes. In each case, the date of erection is noted; if a building was constructed in successive units, the dates for the respective units are indicated in order. Location of the buildings is found on the map which follows.

Allen Hall $(1922,1954)$ houses the School of Journalism and the University Printing Department ; it is named for the late Eric William Allen, who came to Oregon in 1912 and was the first Dean of the School, 1916-1944.

Bean Complex (1967) houses the dormitory halls Caswell, DeBusk, Ganoe, Henderson, Moore, Parsons, Thornton, and Willcox, all named for past members of the University faculty. Robert Sharp Bean was a member of the first graduation class at the University of Oregon in 1878; he later becane a member of the Board of Regents (1899-1920), and was a United States District Judge.

Carson Hall (1949) women's dormitory, named for Luella Clay Carson, Professor of English Literature (18881895) and the first Dean of Women (1900-1909) ; she served unofficially as Dean of Women from 1888-1900.

Clinical Services Building (1969) houses such special training programs and community services as speech pathology and audiology, mental retardation, and the Center on Human Development.

Chapman Hall (1939) houses the School of Librarianship, the Department of Religious Stdies, the Graduate School and the vice-chancellor for Facilities Planning ; it is named for Charles H. Chapman, second President of the University of Oregon, 1893-1899.

Computing Center (1967, 1970) houses the computing facilities for the University, serving instructional, research, and administrative needs.

Condon Hall $(1924,1968)$ provides classrooms and offices for the Departments of Geography and Classics, the University Library Map Room and the Learning Resources Center ; it is named for Dr. Thomas Condon, a member of the first faculty and professor of geology (1876-1905).
Deady Hall (1876-1913) houses
classrooms and offices of the Department of Mathematics ; for almost a decade, this building was the University and all university functions took place here. It was built by the citizens of Lane County and given to the state for the State University. Matthew Deady, for whom it is named, was a member and president of the Board of Regents (1873-1893) and author of the Oregon Civil Code. He was a United States District Judge. Deady Hall is listed on the National Register of Historic Places.
Earl Complex (1955) houses the dormitory hall McClure, Morton, Stafford, and Young, all named for past faculty members. Virgil Delman Earl, for whom it is named, was Dean of Men, 1931-1948.
The Education Building (1921) houses offices and classrooms for the College of Education.
Erb Memorial Union (1949, 1963, 1974) houses a variety of student cultral and recreational activities, including the offices of the Associated Students and the Oregon Daily Emerald, and is financed with student fees and its own earnings, initial funding for construction came from alumni, friends, students, and Eugene merchants. It is named for Donald Erb, seventh president (1938-1943), who was instrumental in creating interest in the need for a student union on the campus.
A. A. Esslinger Hall (1936, 1967, 1971) houses the offices and classrooms for the College of Health, Physical Education, and Parks and Recreation, and a number of gymnasiums and courts. Dr. Esslinger was dean of the School, 1953-1973.
Faculty Center $(1885,1963)$ is a wooden Victorian residence originally constructed by Professor George Collier (1879-1895) and purchased by the University in 1895. It was the residence of the University President, 1896-1930, the Chancellor, 1932-37, and again the President, 1937-1940. It has been remodeled to house Faculty Club dining and meeting roons.
Fenton Hall (1906, 1914, 1977), built originally for the University Library, in 1938 became the School of Law. It has undergone major remodeling for use by the Department of Mathematics main office and the University Archives. William David Fenton was a lawyer and judge in Oregon, and donated the Kenneth Lucas Fenton Memorial Library to the School of Law in memory of his son.

Friendly Hall (1893, 1914, 1929) was the first co-ed dormitory at the University (1893). It became a men's dormitory in 1894 and remained this
until 1929. It currently houses the offices of the Dean of Arts and Sciences, and of Academic Advising, and classrooms and offices for the various language departments. The Robert Donald Clark Honors College is here also, named for the eleventh University President. Samson Friendly was a Regent, 1895-1915, and a founder of the University.

Gerlinger Hall $(1921,1978)$ houses the beautiful Alumni social hall, classrooms, a swimming pool, and a part of the Physical Education department and facilities. It is named for Irene Hazard (Mrs. George)
Gerlinger, who led the drive for funds to finance its construction and was a member of the Board of Regents, 1914-1929.
James Henry Gilbert Hall (1916, 1921, 1954) houses the College of Business and the Department of Anthropology, and provides classrooms and lecture halls for the general University. Dr. Gilbert was professor of economics from 1907, and dean of liberal arts, 1925-1947.

Hayward Field Grandstands (1920, 1925, 1975) provide spectator seats for about 10,000 persons at track events. William Louis Hayward was professor and track coach, 1904-1947, trainer for all athletic teams, 1903-1940, coach for the Olympic teams, 1908, 1912, and Olympic trainer, 1912-1932.
Hamilton Complex (1962) houses the dormitory halls Boynton, Cloran, CcClain, Tingle, Spiller, Robbins, Dunn, Collier, Burgess, and Watson; all are named for past University faculty members. James W. Hamilton was a Regent, 1901-1929, and a Circuit Court Judge.
Hendricks Hall (1918), originally a women's dormitory, now houses the School of Community Service and Public Affairs, and the Bureau of Governmental Research and Service ; it is named for Thomas Hendricks, banker and Regent, 1872-1885, and a founder of the University.
Johnson Hall (1915) also known as the Administration Building, houses the offices of the President and the VicePresidents and their various staffs, the offices of the Chancellor and his staff, and the telephone exchange. John Wesley Johnson was the first president of the University. 1876-1893, and Professor of Latin, 1876-1898.

Lawe Center (1970) houses the School of Law, the Kenneth Lucas Fenton Memorial Law Library, and a federal courtroom.

Lawerence Hall (1902, 1914, 1957, 1971) houses the various departments, offices, and studios of the School of

Architecture and Allied Arts, and the Architecture Library; it is named for Ellis Fuller Lawrence, first dean of the School of Architecture, 1914-1946, and the architect for some seventeen structures on campus.

Leighton Pool (1959) men's swimming pool, is named for Ralph Waldo Leighton, dean of the School of Physical Education, 1938-1953.

Library (1937, 1950, 1966). It was constructed initially by PWA labor and a loan from the Federal government that was repaid by the student building fee. The original part of the library cost $\$ 448,000$ and the state paid no part of the construction cost.

McArthur Court (1926-1959), constructed almost entirely from funds derived by the use of the student building fee, was at the time of its construction one of the largest and best-equipped athletic buildings in the West. It is named for Clifton N. "Pat" McArthur, "Father of University Athletics," who while a student (Class of 1901) served as student manager for athletics (similar to the modern post of athletic director) ; he was a member of the U.S. House of Representatives, 1915-1923.

Museum of Art (1931), a gift of the people of the state and University alumni and friends, particularly Gertrude Bass Warner, who contributed the Murray Warner Collection of Oriental Art.

Music Building (1921, 1949, 1972, 1978) houses the School of Music, and the Beall Concert Hall.

Oregon Hall (1973) houses various administrative and student services, including the business office, the registrar, student personnel, and student finance.

Prince Lucien Campbell Hall (1964, 1967) houses the College of Arts and Sciences departments of Economics, English, History, Philosophy, Political Science, and Sociology, and the offices for Summer Session and Continuing Education, among others. Campbell was President of the University, 1902-1925.

Science Complex (1951, 1961, 1966, 1971, 1973) houses the College of Arts and Sciences departments of Biology, Chemistry, Geology, and Physics, and the Museum of Natural History.

Science Library (1968) houses the specialized library collections required by the various science disciplines.

Straub Hall $(1929,1975)$ was originally a men's dormitory named the Tohn Straub Memorial Building. It houses the Department of Psychology. John Straub was professor of Greek 1878-1930, acting president, 1893, Dean of Men, 1900-1925, Dean of the

College of Literature, Sciences, and the Arts 1900-1920. He served unofficially as Dean of Men, 1888-1900, and continued as an active Professor of Greek through 1930.
Student Health Center (1965) Thouses the offices of physicians and nurses, and an infirmary.

Susan Campbell Hall (1921), originally built as a dormitory for 112 women, now houses a variety of administrative offices including the Development Fund, University Relations, Old Oregon, Publications, News Bureau, Alumni Office, Counseling, and Career Planning and Placement. Susan Church Campbell was initially employed by the University in 1908 as Director of Dormitories, a position she gave up when she married President Campbell. She was an active supporter of the University and its fund-raising drives.

Tennis Courts (1972), an open-air pavilion roofed for protection from rain and wind, provides year-round courts for handball and tennis.

University Inn (1967), formerly College Inn, a privately owned housing facility for 450 students, was purchased by the State Board of Higher Education
in 1975 for use as a dormitory.
Villard Hall $(1886,1949)$ ties with the Faculty Center as the second oldest building on campus. It houses the Department of Speech, the radio and television broadcast studios, and the Horace W. Robinson Theatre in a separate wing. Henry Villard was President of the Northern Pacific Railroad and the first benefactor of the University. Villard Hall is listed on the National Register of Historic Places.

Volcanology Center (1936, 1965), originally constructed as the infirmary and student health center, the building was remodeled to accommodate graduate instruction and research in volcanic geology, petrology, geochemistry, and geophysics.

Walton Complex (1957) houses the dormitory halls Adams Clark, Douglass, Smith, Sweetser, Schafer, McAlister, Hawthorne, Dyment, and DeCou, all named for past faculty members of the University. Joshua J. Walton was a lawyer, judge, and Regent, 1872-1885 and 1893-1895; he was secretary of the Board of Regents, 1873-1906, and a founder of the University.



## Offices and Services

Academic Advising, Friendly, E7
Admissions, Oregon, I7
Affirmative Action, Oregon, I7
Air Force ROTC, 1675 Agate St., J2
Alumni Relations, Susan Campbell, D5
Anthropology, Gilbert, B7
Architecture \& Allied Arts, Lawrence, E9
Architecture, Lawrence
Art Education, Lawrence
Art History, Lawrence
Fine \& Applied Arts, Lawrence
Landscape Architecture, Lawrence
Urban Planning, Lawrence
Army ROTC, 1679 Agate St., J2
Arts \& Sciences, College, of, Friendly, E7
Associated Students, EMU, F6
Athletics, Intercollegiate, Men's, McArthur Ct. E3
Women's, Gerlinger, D5
Biology, Science II, G8
Bookstore, 895 E. 13th, B7
Broadcast Services, Villard, C9
Business Administration, College of, Gilbert, B7
Accounting \& Quant. Methods, Gilbert
Finance \& Business Economics, Gilbert Management, Gilbert Marketing, Transportation, \& Business Envir., Gilbert
Business Office, Oregon, I7
Business Research, Bureau of, Gilbert, B7
CORBEH, 1590 Willamette
Campus Security, Straub, G5
Capital Market Research, Ctr. for, Gilbert, B7
Career Information System, Hendricks, E5
Career Planning \& Placement, Susan Campbell, D5
Chancellor, State System of Higher Ed., Johnson, D7
Chemistry, Science II, G8
Childcare Center, EMU, F6
Child Care \& Development Center, 1511 Moss, L4
Chinese \& Japanese, Friendly, E7
Classics, Condon, B7
Clinical Services, A1
Cognitive Lab. (Psych), Straub, F5
Communication Research, Ctr. for, Villard, C9
Community Art Studies, Inst. for (AAA), Lawrence, E9
Community Service \& Public Affairs, Hendricks, E5
Comparative Literature,
Friendly, E7
Computer Science, Computing Ctr., B8
Computing Center, B8
Consumer Research Center (Bus. Ad.), Gilbert, B7
Continuing Education, Div. of, 1479 Moss St., L5
Counseling Center, Susan Campbell, D5

DeBusk Memorial Center (Educ.), Education, A4
Development Fund, Susan Campbell, D5
Displaced Homemakers/ Widowed Services, 1609 Agate St., J3
Division of Developmental Studies (Educ.), 1761 Alder, A1
Drug Information Center 1763 Moss, L1
Economics, Prince Lucien Campbell, B6
Education (Main Office), Education Bldg., A4
Educational Policy and Management, Ctr. for (CEPM) (Educ.), 1472
Kincaid St., B5
English, Prince Lucien Campbell, B6
Environmental Research, Ctr. for (AAA), Lawrence, E9
Environmental Studies Center, Prince Lucien Campbell, B6
ERIC Clearinghouse on Educational Mgt. (Educ.), Library, C4
Ethnic Studies, Prince Lucien Campbell, B6
Field Training and Service Bureau (Educ.), Lib. C4
Financial Aid, Oregon, I7
Forest Industries Mgt. Ctr., (Bus. Ad.), Gilbert, B7
Geography, Condon, B7
Geology, Geology Bldg., E7
German \& Russian, Friendly, E7
Gerontology, Ore. Ctr. for (Health Ed), 1627 Agate St., J3
Governmental Research \& Service, Bur. of, Hendricks, E5
Graduate School, Chapman, C7
Health, Physical Education, \& Recreation, Coll. of, Esslinger, F4 Recreation, Esslinger Dance, Gerlinger Anx., D4 Health Ed., Esslinger Physical Ed., Esslinger Rec. \& Park Mgt., Esslinger
High School Equivalency Program (HEP), Emerald, G7
History, Prince Lucien Campbell, B6
Honors College, Friendly, E7
Housing, Walton, I5
Human Development, Ctr. on (Educ.), Clinical Serv. Bldg. A1
Industrial \& Labor Relations, Inst. of (Bus. Ad.), Gilbert, B7
Information Desk, Oregon, I7
International Business Studies, Ctr. for (Bus. Ad.), Gilbert, B7
International Student Services, Oregon, I7
Invention \& Innovation, Ctr . for (Bus. Ad.), Gilbert, B7
Journalism, Allen, E7
Labor Ed. Ctr., Prince Lucien Campbell, B6
Law, Law Ctr., B9
Learning Resources Center, Condon, B7

Leighton Pool, F4
Leisure Studies, Ctr. for (HPER), Esslinger, F4
Librarianship, Chapman, C7
Library (Main Office)
Library C4
AAA, Lawrence, E9
Map Room, Condon, B7
Science, F8
Lifelong Learning, Oregon, I7
Linguistics, Prince Lucien Campbell, B6
Marine Biology, Inst. of (Bio), Science III, G8
Mathematics, Fenton, D7
Molecular Biology, Inst. for (Bio/Chem), Science II, G8
Music (Main Office), Music Bldg., B1
News Bureau, Susan Campbell, D5
Northwest Community Ed, Development Ctr. (Educ.), 1724 Moss St., L1
Old Oregon, Susan Campbell, D5
Oregon Daily Emerald, EMU, F6
Oregon St. Syst. of Higher Ed., Johnson, D7
Orientation Office, Oregon, I7
Parking Permits (Campus
Security ), G5
Personnel, Oregon, I7
Philosophy, Prince Lucien Campbell, B6
Physical Plant Main Office, G10
Physics, Science I, F8
Political Science, Prince Lucien Campbell, B6
Post Office, EMU, F6
President, Johnson, D7
Printing Department, Allen, E7
Psychology, Straub, F5
Psychology Clinic, Straub, F5
Publications, Susan Campbell, D5
Recital Hall (Beall), Music, B1
Registrar, Oregon, I7
Religious Studies, Chapman,
Research in Behavioral Education for the Handicapped, Ctr. at Oregon for (CORBEH), 1590
Willamette St.
Romance Languages, Friendly, E7
Self-Development, Ctr. for, Emerald, G7
Sociological Study of Women, Ctr. for, Prince Lucien Campbell, B6
Sociology, Prince Lucien Campbell, B6
Speech, Villard, C9
Speech \& Hearing Center, Clinical Services Bldg., A1
Student Conduct, 1479 Moss St., L5
Student Employment,
Oregon, I7
Student Government (ASUO), EMU, F6
Student Services, Oregon I7
Summer Session, Prince
Lucien Campbell, B6
Teacher Education, Education, A4
Theatre, Robinson, Villard, C9

Theoretical Science, Inst. of (Math/Physics), Science II, G8
University Relations, Susan Campbell, D5
Upward Bound, Condon, B7
Volcanology, Geology, F7
Women's Studies, Prince
Lucien Campbell, B6
YMCA, EMU, F6
YWCA, Health Ctr., I7

## Building Directory

Allen Hall E7
Beall Hall B1
Bio-Social Research Facility L10
Bookstore B7
Canoe Shack H10
Chapman Hall C7
Clinical Services Building A1
Computing Center B8
Condon Hall B7
Deady Hall D8
Education Building A4
Education Annex A3
Emerald Hall G7
Erb Memorial Union F6
Esslinger Hall F4
Faculty Center E6
Fenton Hall D7
Friendly Hall E7
Gerlinger Hall D5
Gerlinger Annex D4
Geology Building E7
Gilbert Hall B7
Hendricks Hall E5
Johnson Hall D7
Law Center B9
Lawrence Hall E9
Library C4
McArthur Court E3
Museum of Natural History, F8
Music Building B1
Museum of Art C6
Oregon Hall I7
Prince Lucien Campbell B6
Physical Plant G10
Robinson Theatre, C9
Science I F8
Science II G8
Science III G8
Science Library F8
Straub Complex F5
Student Health Center I7
Susan Campbell Hall D5
Villard Hall C9
Volcanology Building F7

## Dormitories

Bean Complex (Bean East, Bean West, Caswell, DeBusk, Ganoe, Henderson, Moore, Parsons, Thornton, Wilcox) K5
Carson Hall H6
Earl Complex (McClure, Morton, Sheldon, Stafford, Young) G5
Hamilton Complex (Boynton, Burgess, Cloran, Collier,
Dunn, McClain, Robbins, Spiller, Tingle, Watson) J6
University Inn-1000
Patterson Street
Walton Complex (Adams, Clark, DeCou, Douglass,
Dyment, Hawthorne,
McAlister, Shafer, Smith, Sweetser) I5

## Retention Data

Pursuant to Public Law $94-482$ (section 132 of the Education Amendments of 1976 to the Higher Education Act of 1965), the University is required to prepare and disseminate selected information to students. Among the information so required is a statement on the retention of students at the University The following data are presented in support of this requirement.

|  | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1976-77 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Final enrollment Fall Term | 15,476 | 16,090 | 16,323 | 17,427 | 16,816 |
| Enrollment Spring Term for Fall Term enrollees | 12,436 | 12,925 | 12,960 | 13,278 | 12,971 |
| Degrees awarded Fall and Winter Terms ............................. | 1,017 | 1,090 | 1,101 | 1,252 | 1,281 |
| Total Spring Term enrollment and other degrees awarded ...... | 13,453 | 14,015 | 14,063 | 14,530 | 14,252 |
| Percentage retained or graduated for the year ......................... | 87\% | 87\% | 86\% | 83\% | 85\% |

Enrollment by Major and Classification 1976-77 Academic Year


| Degree | Male Female Total |  |  | Degree M |  | Male Female Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Advanced Degrees |  |  |  | Baccalaureate D |  |  |  |
| Master of Arts | 18 | 23 | 41 | Bachelor of Ar | 34 | 54 | 88 |
| Master of Science | 29 | 30 | 59 | Bachelor of Sc | 138 | 102 | 240 |
| Master of Architecture ......................... | 2 | 1 | 3 | Bachelor of Ar | 17 | 1 | 18 |
| Master of Business Administration ......... | 23 | 4 | 27 | Bachelor of Bu | 10 | 3 | 13 |
| Master of Education .......................... | 8 | 12 | 20 | Bachelor of Ed | 0 | 0 |  |
| Master of Fine Arts .... | 1 | 0 | 1 | Bachelor of Fin | 1 | 3 | 4 |
| Master of Landscape Architecture ............ | 0 | 1 | 1 | Bachelor of Int | 0 | 1 | 1 |
| Master of Library Science ........................ | 4 | 10 | 14 | Bachelor of Lan | 6 | 3 | 9 |
| Master of Music ................................... | 2 | 2 | 4 | Bachelor of Mu | 3 | 3 | 6 |
| Master of Urban Planning ...................... | 2 | 0 | 2 | Bachelor of Phy | 0 | 0 | 0 |
| Doctor of Philosophy ............................ | 20 | 7 | 27 |  |  |  |  |
| Doctor of Arts ....................................... | 2 | 0 | 0 2 | Total | 209 | 170 | 379 |
| Doctor of Education ................................. | 3 | 1 | 4 |  |  |  |  |
|  |  | 0 | 0 |  |  |  |  |
| Doctor of Jurisprudence ........................... | 6 | 0 | 6 | Total Degrees | 329 | 261 | 590 |
| Total | 120 | 91 | 211 |  |  |  |  |

## Faculty Index

Abbott, Max G. 226
Achberger, Karen R. 86
Acheson, Keith A. 244
Acker, Joan R. 133
Acker, Martin H. 229
Adler, Jack D. 282
Aikens, C. Melvin 38
Albaum, Gerald S. 203
Albrecht, Robert C. 69, 337, 353
Aldrich, Kenneth R. 270
Alef, Gustave 92
Alexander, Henry A., Jr. 106
Allen, Donald 43
Aly, Lucile F. 69
Ames, Nancy S. 154
Anderson, Daryl 237
Anderson, Frank W. 99
Anderson, Lester E. 353
Andreini, Amedeo 171
Andrews, Fred C. 99
Andrews, George F. 170
Anthony, C. Ross 65
Anthony, Henry G. 328
Archer, Anita 242, 255
Arends, Jane H. 224
Arends, Richard 244
Ashby, Gordon P. 60,334
Ater, Jonathan A. 353
Attneave, Fred 119
Augustine, Lloyd E. 237, 242
Axford, H. William 330, 353
Axner, Marya 189
Ayora, George (Jorge) 127, 161
Ayres, William S. 38, 161
Babcock, Harold C. 337, 353
Bailey, Exine Anderson 315
Bajer, Andrew S. 42
Baker, Alison 37
Baker, Brian H. 80, 85
Baker, C. Edwin 302
Baker, Lois 303, 331
Baker, M. Steven 33
Baker, Ralph B. 189
Baldinger, Wallace S. 186
Baldwin, Ewart M. 80
Baldwin, John E. 37, 52, 353
Baldwin, Margaret 15
Ball, Roland C. 69
Ballester, William 1
Ballew, Van 198
Ballinger, Thomas O. 183
Barker, David L. 42
Barkhurst, Vernon 1

Barnes, Bruce A. 99
Barnes, Eugene 161, 162, 330
Barnett, Homer G. 38
Barnhard, Ralph J. 52
Barnhart, H. Philip 15, 353
Barrar, Richard B. 99
Barry, Frank J. 303
Bartel, Roland 69
Bassford, Paul S. 20
Basye, Wendell M. 302
Bateman, Barbara D. 255
Bates, Barry T. 282
Batiste, Alvin 353
Baugh, William H. 113
Baxter, Z. Diane 282
Baynes, Frank L. 20
Beall, Chandler B. 127
Beal, Edwin F. 202
Beardsley, Kelcey 171
Beck, Jacob 119
Beck, Norman L. 334
Becker, Wesley C. 222, 229, 233, 255
Bednerik, Marya 138
Beebe, John Fred 86, 162
Beelman, Glen T. 99, 160
Belknap, George N. 337
Bellamy, G. Thomas 222
Beltran, George 337
Bennett, Jeanine 282
Bennett, R. Wayne 315
Benson, Joan 315
Berdahi, Robert 37,92
Bergquist. Peters 25, 315
Bernhard, Sidney A. 32, 52
Berreman, Joel V. 133
Besh, Michael 189
Bettis, Susan K. 281
Bettman, Ann 178
Beyer, Kathleen M. 334
Beyer, Wendell Terry 60, 334
Bierwag, Gerald O. 65
Bingham, Edwin R. 92
Birn, Randi M. 127
Birn, Raymond 92
Birrell, Bruce 52
Bittner, Francis W. 316
Boekelheide, Virgil C. 52
Boeshaar, Gregory O. 109
Boeshaar, Patricia C. 109
Bogen, Gerald K. 226
Bogen, Judith R. 15
Boggs, Sam, Jr. 80
Boldt, William G. 289
Bonine, John E. 302
Bonner, Jacqueline 154
Bonnett, Howard T., Jr. 42
Booth, James R. 229, 242

Borchardt, John W. 282
Bordwell, Constance 69
Boren, James L. 69
Boucot, Arthur J. 80
Bowerman, William J. 282
Bowers, C. A. 226
Bowlin, Robert L. 15, 226, 353
Bowman, Robert G. 198
Bowman, Rod 1, 337
Boyd, William B. 92, 337, 353
Bradshaw, William E. 42
Brady, Thomas A. 92
Breidenthal, Leslie T. 315
Bressler, Eugene 33, 178
Brewer, Ruth M. 281
Bricker, Diane D. 222
Briscoe, John L. 170
Britz, Richard 33, 178
Brodie, Donald W. 302
Broekhoff, Jan 25, 282
Brombaugh, John 315
Brooks, Richard L. 282
Brooksby, Wilford A. 20
Brown, G. Z. 33, 170
Brown, Richard Maxwell 92
Brown, Stanley A. 20
Brown, Warren B. 25, 202
Browning, Phillip 222
Bruce, John A. 223
Bruce, Robert K. 337
Bryan, Stanley W. 170
Buch, James 1, 353
Buckeley, Michael 181
Buckner, Paul E. 189
Bullock, Terry 244
Burdell, Paula T. 186
Burdman, Geral Dene 274
Burgner, Jack W. 183
Burns, Carl 171
Burris, Vallon L. 133
Burton, Mary Kennedy 220
Butler, Myrtice E. 237
Bynon, George E. 330
Byrne, Andrew 222
Cadbury, William 138
Caine, John 337, 353
Calin, Françoise 127
Calin, William 127
Calmus, Thomas W. 200
Calvin, James A. 334
Campbell, Nancy Hoh1 186
Campbell, Robert 65
Campillo, Robert H. 1
Capaldi, Roderick A. 32, 42
Carlson, J. Spencer 337
Carlson, Joanne 25

Carlson, Richard O. 226
Carmichael, Carl W. 138, 281
Carnine, Douglas 255
Carp, Teresa C. 58
Carpenter, Jane H. 353
Carrick, Ella S. 331
Carroll, Fanny E. 43
Carroll, George C. 42
Carter, Lawrence 34, 133
Casanova, Leonard J. 337
Castenholz, Richard W. 42
Caulley, Pam 189
Caulfield, Barbara A. 302
Chambliss, Thom 21
Chaney, Richard P. 38
Charters, Werrett W., Jr. 226
Chasson, Robert Timothy 186
Chattoraj, Dhruba 43
Chen, Mau Hsiung 109
Ch'en, Shang-Yi 109
Chickering, Roger P. 92
Chiesa, Danieta 222
Childress-Ullman, Leslie 171
Cho, Nam Sook 52
Cho, Ting-Li 33, 181
Christensen, Ned J. 237
Christensen, Rodney E. 330
Chung, Yun 109
Civin, Paul 99, 353
Clancy, Clarence W. 43
Clark, Chapin D. 302, 353
Clark, Robert D. 138, 337
Clarke, H. Harrison 282
Close, Dan 222
Clyde, John S. 220
Coe-Clark, Peg 189
Coffey, Judith 215, 244
Coffin, Christie J. 169, 170
Cogswell, Carol J. 43
Cohen, Sheldon 119
Coiner, Robert H. 242
Cole, Clifton C. 337
Cole, David L. 155
Coleman, Edwin L., Jr. 69
Coleman, Ralph 237
Colwell, Frances J. 20
Combellack, Frederick M. 58
Comish, Newel H. 204
Conant, Eaton H. 195, 202, 213
Constance, Clifford L. 337
Conte, Paul T. 334
Conway, Steven E. 151
Cook, Stanton 33, 42
Cook, William E. 294
Cooper, Henry F. 127
Craig, Colette G. 97, 161
Crasemann, Bernd 109
Crasemann, Jean M. 43
Crawford, John E. 294
Cressman, Luther S. 38
Cronan, Harry 1,337
Cross, Linfield 15
Cross, Stephen J. 52
Crosson, Anita 222
Crosson, James E. 222
Crowell, Fred 222
Csonka, Paul L. 33, 109
Cunningham, David J. 337
Curland, David J. 127, 161
Curtis, Ann P. 222
Curtis, Charles W. 99
Cuthbert, Fred A. 178
Cutler, Jean 138
Cykler, Edmund A. 316
Dahle, Thomas 138, 226
Dahlquist, Frederick W. 32, 52
Daniels, Ruth O. 353
Dann, Larry 200
Dasso, Jerome J. 200
Davie, William E. 106
Davies, James C. 113
Davis, Lorraine G. 274
Davis, Richard M. 65
Dawes, Robyn M. 34, 119

Dawson, George L. 302
DeChaine, Faber 138
Decker, Leslie 92
DeGidio, Jane Farrand 15
DeHaven, Edna P. 244
deJung, John E. 233
Dellinger, Williams S. 282
DeMers, Gerald E. 282
Deshpande, Nilendra G. 33, 109
Descutner, Janet W. 270
Desroches, Richard H. 127
Deutsch, Steven 133, 336
Dicken, Samuel N. 33,76
Diethelm, Jerome 33, 178
Diller, Edward 86
Dizney, Henry F. 233, 281
Dolby, Lloyd J. 52
Dole, Philip H. 170
Donnelly, Marian Card 186
Donnelly, Russell J. 33, 109
Donis, Jack 178
Dorjahn, Vernon R. 38
Dougherty, David M. 127
Dougherty, M. Frances 270
Dowd, Charles 315
Downes, Bryan T. 220, 215, 218
Dubs, Kathleen E. 69
Dudley, Gordon A. 229
Dull, Paul S. 92
Dumond, Don E. 38, 155, 161
Duncan, Charles T. 294
Durnell, Jane B. 330
Duryee, Frances 43
DuShane, Donald M. 337
DuVall, Lloyd 222, 224, 226
Dwyer, James R. 330
Dyer, Micheal N. 99
Dyke, Thomas R. 52
Eaton, Katherine G. 330
Ebbighausen, Edwin G. 109
Ebersole, Frank B. 106
Eberts, Randall W. 65
Ediger, Loyal D. 237
Edson, C. H. 226
Edwards, Barbara 337
Edwards, Corwin D. 65
Elliott, William R. 138
Ellis, Michael J. 282
Engelmann, Siegfried E. 255
English, Norma 222
English, R. William 222
Erhart, Katherine Patricia 186
Erickson, Kenneth A. 222, 226
Ernst, Alice T. 69
Esherick, Joseph W. 92, 155
Espeseth, V. Knute 244, 255
Etter, Orval 215, 218, 221
Evonuk, Eugene 282
Ewald, Douglas 43
Ewan, Jack D. 294
Ewing, Gary D. 52
Ewing, John 281
Fagot, Beverly 119
Fagot, Robert F. 119
Falcoff, Mark 92, 161
Falconeri, G. Ralph 92, 155
Fairchild, Effie L. 289
Farley, Arthur M. 60
Farwell, Marilyn 69
Faulkner, T. Ray 270
Fausti, Stephen A." 237
Favour-Miller, Molly 189
Fehnel, Richard A. 215, 218, 220
Fenrick, Nancy 255
Fenwick, Patrick P. 289
Ferens, Robert R. 170
Fernald, Russell 42
Ferrington, Gary W. 244
Feves, Betty 353
Fiet, Lowell A. 138
Figenshow, Janet 43
Fink, William 223
Finke, Richard G. 52

Finley, Phillip 171
Finley, Ronald L. 282
Finrow, Gunilla K. 170
Finrow, Jerry V. 170
Fish, Michael B. 63, 155
Fisher, Carl O. 337
Fiszman, Joseph R. 113, 162
Fochtman, Fae 15
Ford, Jeanne A. 33
Ford, Phyllis M. 289
Fosmire, Fred 119
Foss, Gilbert 223
Foss, Hazel M. 281
Foster, David G. 189
Foster, Howard 178
Foster, Wilma 353
Foxworth, Anita 223
Frank, Peter W. 42
Frasier, Brownell 171
Freeman, Robert S. 99
Friedman, Robert P. 138
Frishkoff, Paul 198
Frohnmayer, David B. 302, 337
Fullerton, Sally 215
Furrer, Emil D. 274
Gale, Maradel K. 181
Gale, Richard P. 133, 161
Gall, Joyce 233
Gall, Meredith 233, 244
Gallagher, James J. 336
Gallegos, Enrique 244
Gange, John F. 218
Garfield, Richard F. 170
Gehring, Jane 183
Geltner, Frank 20
Genasci, Donald 170
Ghent, Kenneth S. 99
Gibbons, Elizabeth 171
Gilberts, Robert D. 222, 226, 353
Gilland, Wilmot 33, 170
Gilmore, Dorothy C. 171
Gilmore, Philip C. 170
Gilmore, Susan K. 229
Girardeau, Marvin D. 33, 109
Giustina, Sylvia B. 127
Glanville, Richard 178
Glaser, Peter A. 138
Glaser, Susan R. 138
Glenn, Oakley 337, 353
Glover, Elizabeth G. 282
Goldberg, Lewis 119
Goldman, John 171
Goldman, Marion Sherman 133
Goldman, Paul 133
Goldrich, Daniel 33, 113, 161
Goldschmidt, Steven M. 226
Goldstein, Henry N. 65
Goles, Gordon G. 52, 80, 85
Gontrum, Peter B. 86
Gordon, Daniel N. 133
Gordon-Lickey, Barbara 119
Gordon-Lickey, Marvin 119
Goswami, Amit 33, 109
Govan, Thomas P. 92
Grace, Dale 42
Graham, Grace 226
Grant, Philip 42
Gray, Jane 42, 80
Greenfield, Stanley B. 69
Greenfield, Thelma 69
Gregor, Brian 181
Gressler, Thomas H. 289
Grieg, Russel G. 43
Griffin, Ronald C. 302
Griffin, Tommy Lee 333
Griffith, Clark 69
Griffith, O. Hayes 32,52
Griggs, Allan B. 80
Grimm, Gary 20
Grove, Carl 181
Grove, Myron A. 65
Grover, Dorothy 1,337
Grudin, Michaela P. 151
Grudin, Robert 69, 158

Gustafson, David E. 315
Gustafson, John M. 316
Haar, Franklin B. 274
Hacker, Thomas O. 170
Hacker, William 171
Haemer, Alan 189
Hague, Donald R. 42
Hahn, Walther L. 86
Haisley, Fay 244, 255
Haislip, John A. 69
Haldane, Douglas A. 302
Halgren, Joanne V. 330
Haller, Richard W. 334
Halley, Gregoria 223
Halpern, Andrew S. 223
Halverson, Roy K. 294
Hamblen, Karen 183
Hamilton, John 315
Hampton, Grace 183
Haney, James Anthony 282
Handy, William J. 69
Hanhardt, Arthur M., Jr. 113, 281
Hanna, William S. 92
Hannaford, Frederick T. 171
Hard, Robert 43
Harms, Edward C., Jr. 353
Harris, Leo A. 337
Harris, Patricia Jean 42
Harris, Robert 33, 169, 170, 353
Harris, William H. 244
Harrison, David K. 99
Harrison, Lois Neuwiesinger 315
Harrison, M. Howard 42
Hart, Jack R. 294
Hart, Thomas R. 127
Hart, Willy 15
Hartman, Mary S. 294
Harvey, Mary 215, 218
Hastay, Kathy 171
Hatzantonis, Emmanuel S. 127
Hawk, N. Ray 226, 337, 353
Hayden, Wallace S. 171
Hawkins, Delbert I. 203
Hawn, Arthur W. 170
Haynes, Stephen E. 65
Healey, Derek E. 315
Hearn, Arthur C. 226
Hearn, Linda S. 270
Hedetniemi, Stephen 60
Heilpern, Alfred 331
Heimbigner, M. Charlene 42
Heins, W. Sanford 15
Heiny, Henriette Anna Margarete 282
Heinzkill, J. Richard 330
Helbling, James 328
Helphand, Kenneth 33, 178
Helzer, Peter 183
Henderson, Craig 189
Henrickson, Otto 21
Herbert, Daniel M. 171
Herbert, Edward 32,52
Herbert, Robert T. 106
Herrick, David R. 33, 52
Hersh, Richard H. 222, 244
Herskowitz, Ira 32, 42
Hertlein, Forest 223
Hesse, Karl D. 244
Hiemstra, Hal 181
Hildreth, Richard G. 302
Hill, Pearl M. 154
Hill, Richard J. 34, 133, 215, 218, 353
Hills, Kenneth D. 229
Hines, Clarence 226
Hintzman, Douglas 119
Hintz, Carl W. 331
Hirschfield, Jim 189
Hladky, J. Robert 315
Hoard, James E. 69, 97
Hodgdon, Rosaria 170
Hodge, George M., Jr. 169, 170
Hoffer, Alan R. 99
Holbo, Paul S. 92, 161
Holden, Madronna 38, 157
Holland, Francine 255

Hollis, Orlando John 303
Holmer, Freeman 353
Holser, William T. 80
Holy, Judith 43.
Holzapfel, Christina M. 43
Hopewell, Michael H. 200
Hopkins, George 316
Hops, Hyman 223
Horeis, Martin 161
Horner, Robert H. 223
Horstmann, Judith L. 43
Horyna, Larry L. 244
Hosticka, Carl J. 215, 218
Hovet, Thomas, Jr. 113
Howard, Dennis R. 289
Howard, Donald C. 1, 337
Hoyle, Graham 42
Hsu, Jane Yen-Cheng 155, 330
Hubka, Thomas C. 170
Hudzikiewicz, Mary Alden 337
Hugi, Joanne 60, 334
Hull, Ray E. 244
Hulteng. John L. 294
Hultgren, A. Stanley 229
Humphrey, Dwight H. 331
Hunderup, J. I. 353
Huneke, Douglas 151
Hunter, Donald L. 331
Hurwitz, Robert I. 315
Hwa, Rudolph C. 33, 109
Hyatt, Dennis R. 330
Hyman, Ray 119
Hynes, Joseph A., Jr. 69
Ice, Gene E. 109
Ingalls, Paul D. 109
Ingalls, Robert C. 353
Inman, Dean P. 223
Irvin, Larry 223
Jackson, Mae L. 244
Jackson, Muriel Kappeler 337, 353
Tackson, Robert M. 127
Jackson, Ruth M. 70
Jacobsen, Michael A. 186
Jacoisson, Jon L. 302
Jacobson, Leonard D. 274
Jacobson, Paul B. 226
Jacobson-Leong, Esther 155, 186
Jaffe, Austin 200
James, Robert C. 189
Jepsen, Daniel C. 20
Jeffe, George S. 178
Jewett, Wayne J. 170
Johannessen, Carl L. 43, 76, 161
Johannis, Theodore B., J. 133
Johansen, Carol 215
Johnson, Benton 133
Johnson, Carl L. 127
Johnson, Donald N. 33, 218, 221
Johnson, Gloria E. 69
Johnson, Judi 21
Johnson, Lyman T. 170
Johnson, Miriam M. 133
Johnson, Sally 223
Johnson, Stephen M. 119
Johnson, Wanda M. 1, 353
Jones, Beverly J. 183
Jones, Catherine M. 195, 202
Jones, Holway R. 330
Jones, Marj 21
Jost, Patricia 52
Ju, Ilmun 33, 109
Jung, Angela 63, 155
Jurecka, Paul 171
Kaehn, Dan 33
Kahananui, Jon 337
Kaminska, Anna 162
Kammerer, Edward W. 315
Kantor, William 99
Katz, Rachelle 20
Kaufman, George G. 200
Kays, M. Allan 80

Keana, John F. W. 52
Keele, Steven 119
Kehrli, Herman 221
Keith, Robert 33, 221, 218
Keller, Homer T. 316
Kellman, Michael E. 33,52
Kelly, James G. 119, 215, 220, 353
Kelly, Kerry 1, 337
Kemp, Edward C. 330
Kemp, Elaine A. 330
Kemp, James C. 109
Kensler, Gordon L. 169, 183
Kerans, Janet 223
Kerrigan, Marlene B. 186
Keutzer, Carolin 25, 119
Kezer, James 43
Khang, Chulsoon 65
Kiefer, Susan A. 330
Kim, Hee-Jin 125, 155
Kimball, R. Alan 92, 151, 162
Kimble, Daniel P. 119
Kime, Robert E. 166, 274, 281
Kimmel, Charles B. 42
Kirkpatrick, Laird 302
Kirkpatrick, Rich 171
Kirtner, William 229
Kittel, Peter 109
Kittoe, Edward D. 70
Kitzhaber, Albert R. 69
Kizer, Linda A. 15
Kleinsasser, William 170
Kleinsorge, Paul L. 65
Klemm, LeRoy H. 52, 166
Klonoski, James R. 113
Klopfenstein, Charles E. 52
Knight, Louise 223
Knollin, Ernesto R. 282
Koch, James L. 202
Koch, Richard M. 99
Koenig, Thomas W. 52
Koep, Elva 15
Kohl, Stephen W. 63, 155
Kokis, George 189
Koplin, H. T. 65
Koscielny, Franciska 315
Kostka, Robert 189
Koyen, Gary 215, 218
Kranzler, Gerald D. 229
Krause, LaVerne 189
Krause, Melvin A. 282
Kremer, Edmund P. 86
Kretsinger, Elwood A. 138
Krieg, Clarice E. 331
Kroeger, Linda A. 274
Krueger, E. Rex 353
Kubasta, Bonnie 189
LaCava, Gerald J. 198
Lacock, James A. 335
Lacy, Frank R. 302
Lallas, John E. 226, 337
Lamadrid, Enrique R. 127, 161
Lamon, William E. 244
Lancaster, Steven 181
Lance, Wayne D. 244, 255
Landman, Janet 223
Lang, Robert G. 92
Lanier, Vincent 183
LaRusso, Dominic A. 138
Lauris, Catherine Miller ii, 337
Lawrence. Hank 178
Lazarus, Joan H. 270
Leahy, John V. 33, 99
LeCuyer, Annette 171
Lee, Donald Moon 15
Lee, Ira D. 315
Lee, Paul R. 328
Lee, Terry D. 52
Leeper, Ropert 119
Lefevre, Harlan W. 109
Leistner, Charley A. 138
Lemert, James B. 294
Lemman, W. T., Jr. 353
Lemon, Herbert C. 20
Leonard, William C. 330

Leong, Albert 86, 162
Leppmann, Wolfgang A. 86
Lesyk, Susan 154
Levi, Don S. 106
Lewinsohn, Peter M. 119
Lichtenstein, Edward 119
Lidz, Jane 171
Lieuallen, Roy E. 353
Linderski, Jerzy 92, 157
Lindholm, Richard 33, 200
Lindstrom, J. Orville 337
Lipton, S. Gregory 33, 181
Litchman, Mary E. 15
Littman, Richard 119
Lloyd, Susan 189
Lockard, Robert C. 330
Lodewick, Robin B. 330
Loeb, Henry L. 99
Lomax, Alfred L. 204
Long, Avard C. 20, 353
Long, Richard J. 330
Longhi, John 80
Lookabill, Larry 198
Lorange, Leland 337
Lorwin, Val R. 92
Loughary, John W. 229
Love, Glen A. 69
Lovell, Lloyd E. 233
Lovinger, Ronald 33, 170, 178
Lowe, Raymond N. 229
Lowenstam, Steven D. 58
Lowndes, Douglas H. 33, 109
Loy, William G. 33, 76
Luebbers, Gary M. 329
Lukacs, John R. 38
Lund, Ernest H. 80
Luneski, Chris J. 198
Luse, Jim 189
Lynch, James H. 281
Lynch, Marcia 189
Lynch, Stanley 244
Lyons, Richard M. 69
MacDonald, Neil 43
Mace, Arthur E. 198
Mace, Miriam 138
Maddex, Jack P. 25, 92
Madrid, Bruno V. 270
Maier, Eugene A. 99
Malarkey, Deirdre D. 330
Malarkey, Stoddard 25, 69, 158
Malsch, Derry 69, 97
Mannheim, Philip D. 33, 109
Markley, Margaret 331
Marlow, Elizabeth A. 127
Marmont, Wendy 223
Marrocco, Richard 119
Marshall, Robert C. 237
Martin, Gary M. 315
Martin, Walter T. 34, 133, 281
Mason, Georgia 43
Mate, Mavis Howe 92, 163
Matela, Ron 178
Matthews, Brian W. 32, 109
Matthews, Esther E. 229
Mattis, James M. 33, 218, 221
Mattson, Robert H. 226, 255
Maujean, Didier 189
Maves, Lawrence C., Jr. 315
Maveety, Beth E. 86
Maveety, Stanley R. 69
Maxwell, Sarah Calkins 315
May, Barbara Dale 127
Mazo, Robert M. 33, 52
McBirney, Alexander R. 80, 85
McCarty, Lois Black 337
McCarty, Donald 15
McClain, Yoko M. 63, 155
McClure, Ian 178
McClure, Joel W.: Jr. 25, 33, 109
McCluskey, William R. 20
McCollough, Robert R. 330
McConnaughey, Bayard H. 42, 165
McCosh, David C. 189
McCready, Reyburn R. 330

McCue, Betty F. 269, 282
McDaniels, David K. 33, 109
McDonald, Duncan L. G. 294
McDonald, James E. 255
McFee, June K. 183
McFee, Malcolm 38
McIntyre, Murdock E. 20
McKenzie, A. Dean 162,186
McKenzie, Donna M. 281
McKinlay, Bruce 218, 220
McKinnon, Marlene 34
McLaughlin, W. N. 1, 337, 353
McLaughlin, Daniel J. 52
McManus, John C. 315
McMillan, Adell 20, 353
McNeir, Corinne C. 331
McNeir, Waldo F. 70
McWilliams, James R. 86
Means, Paul B. 125
Medler, Jerry F. 113
Mehren, Laura 43
Merkle, Judith 113, 155, 162
Mertill, Fredric R. 302
Metzler, Kenneth T. 294
Meyer, Claire 330
Meyers, Joseph 33, 178
Mikesell, Raymond F. 65, 161
Miller, Alan C. 330
Miller, Frances 220
Miller, Fred N. 282
Miller, James A. 315
Miller, Kenneth G. 99
Miller, Marian Hayes 282
Miller, Myra 215
Miller, Susan J. 244
Millhollin, Richard M. 334
Mills, Thomas J. 15
Minshall, Robert 15
Mitchell, Joyce M. 34, 113
Mitchell, Sandra L. 60
Mitchell, William C. 34, 113
Mittman, Arthur 233
Molè-Bajer, Jadwiga 43
Moll, Ernest G. 70
Molly, Kenneth R. 329
Montgomery, Kirt E. 138
Montlick, Terry F. 80
Mooney, Ralph James 302
Moore, Carlisle 70
Moore, Caroline Jean 223
Moore, Gregory G. 353
Moore, J. Robert 315
Moore, Josephine Stofiel 337
Moore, Randall S. 315
Morovesik, Michael 33, 109
Moreno-Black, Geraldine 38
Morris, Robert W. 42, 167
Morrison, Veroniqué 127
Moseley, Gerard 1, 109, 353
Moskovitz, Michael K. 335
Mossberg, Barbara Clarke 69
Mossler, Donna L. 220
Moulton, Peter 60
Morrsund, David G. 60
Moursund, Earl E. 170
Moursund, Janet 233
Moursund, Lulu V. 99
Mowday, Richard T. 202
Moye, Gary W. 170
Mrowka, Jack P. 33, 76, 161
Munkres, Arden 223
Munoz, Christopher 1
Munson, Corlee 282
Munz, Frederick W. 42
Murase, Robert 155, 178
Murphy, Frank D. 335
Murphy, Gordon J. 42
Murray, Neil 15
Murray. Wesley A. 178
Myers, Lew B. 255
Nakai, Kate Wildman 155
Nakai, Yoshiyuki 63, 155
Nash, Barbara 334
Nave, Gary 223

Neal, Larry L. 281, 289
Neill, Michael J. 220
Nelson, John 178
Nelson, Kim 330
Nelson, Roy Paul 294
Nestvold, Karl J. 294
Newman, Judy 223
Newsom, Frances S. 331
Nichols, Douglas R. 289
Nicholls, Roger A. 86
Niven, Ivan M. 99
Nixon, C. Max 189
Nolt, Ira G. 109
Norwood, William 337
Novick, Aaron 25, 32, 42, 353
Novitsky, Barbara-Jo 171
Novitski, Edward 42
Noyes, Richard M. 52
Nye, Robert E. 316
Nye, Vernice T. 244
Oakrock, Barbara 178
Oberle, Judson 223
O'Connor, Anthony J. 330
Ohlerking, Damon 178
Okada, Frank S. 189
Olivier, Louis A. 127
Ollerenshaw, Kay 330
Olum, Paul 99, 337, 353
Olum, Vivian 119
Olson, Christine 330
Olson, Kristi 223
O'Neill, Barbara 330
Orbell, John M. 34, 113
Orford, Gale B. 289
Orr, M. Cecily 330
Orr, William N. 80
Osibov, Henry 226, 337
Ostermeier, Richard M. 109
Osternig, Louis 167, 282
Overley, Jack C. 109
Owen,Harold 315
Owen, Jennifer 189
Owen, Joyce 43
Ozanne, Peter A. 302
Pacheco, Dennis L. 171
Pacheco, Ida C. 242
Page, Tanya 86, 162
Palandri, Guido A. 330
Palmer, Theodore W. 99
Park, Kwangjai 109
Parkinson, Carole 1, 337
Parr, Virginia 330
Parsons, John 337
Parsons, Walter 1,337
Pascal, C. Bennett 58, 157
Passy, Lynn 215, 220
Patterson, Gerald R. 255
Patton, Clyde P. 76
Paul, Huibert 330
Paul, Kenneth H. 189
Paulin, Richard 186, 333, 353
Pease, Michael R. 170
Peet, Teresa 15
Perron, Robert 178
Perry, Jack 189
Perry, Louis B. 353
Person, Lois E. 289
Peter, Marshall 223
Peterson, Andrea L. 186
Peterson, Charlotte 233, 242
Peticolas, Warner L. 32, 52
Peting, Donald L. 170
Pettinari, James A. 170
Philips, Paul J. 220
Piccioni, Pasquale M. 33, 170
Pickering, Richard C. 189
Pickett, Barbara 189
Piele, Philip K. 226
Pien, Diana L. 119
Pierce, Lawrence C. 34, 113
Pierson, P. H. 20
Pierson, Stanley A. 92, 151
Pike, Lawrence H. 42

Plant, Helmut R. 86
Plater, Daryl 171
Platt, George 33, 302
Plesums, Guntis 171
Poe, Gerald D. 315
Polk, Kenneth 133
Pomeroy, Earl 92
Poole, Keith T. 113
Poole, Roy R. 244
Pope, Daniel A. 92
Pope, Barbara Corrado 163
Popoff, Lance 1
Porter, Catherine M. 233, 281
Porter, Kenneth W. 92
Posner, Michael I. 119
Pospisil, Zdenka 43
Postlethwait, John H. 42
Poticha, Otto 171
Povey, David 33, 181
Powell, Donald W. 25
Powell, John L. 109
Powers, Perry J. 127, 157
Press, Leonard 181
Pressman, Hope Hughes 337
Prewitt, Thomas D. 138
Price, Edward T. 33,76
Primuth, David R. 335
Proskurowski, Andrzej 60
Pruitt, Buster E. 274
Puckett, Jessie L. 282
Pusateri, Gus P. 334
Pyle, Betty 337
Racette, George A. 200
Racine, Robert 189
Radin, Margaret J, 302
Radostitz, J.V. 109
Ragatz, Richard 33, 181
Ramey, Marjory 15
Ramsing, Kenneth D. 202
Randolph, William D. 302
Rands, Ralph C. 226
Rankin, Kelly D. 282
Rankin, Richard J. 233
Rappa, Jim 189
Rarick, Galen R. 294, 353
Ray, Milton L. 302
Rayfield, George W. 109
Reeder, Alan F. 223
Reinhard, Diane L. 222, 233
Reinmuth, James E. 195, 198, 353
Reithel, Francis J. 52
Rendall, Steven F. 127, 159
Reuter, Edward R. 282
Reynolds, John S. 33, 171
Reynolds, Stephen 125,162
Rhoda, William P. 269, 282
Rice, Jack M. 80
Rice, James L. 86, 162
Rice, Karla S. 282
Rich, Stuart U. 203
Richard, Carol 1
Richard, K. Keith 330
Richards, Larry E. 198
Richardson, John A. 353
Richins, W. Dwaine 204
Rider, Morrette 315, 353
Riley, W. Parkes 113, 155
Ripley, Theresa M. 15, 229
Ritchey, Norval J. 269
Ritson, Robert J. 282
Robeck, Mildred C. 244
Robert, William J. 203
Robertson, Howard 162, 330
Robertson, Linda R. 151
Robinson, Deanna M. 138
Robinson, Horace W. 138
Rockett, William 69
Rodney, Lynn S. 269, 289, 353
Romm, Richard 15
Romney, Miles C. 353
Rood, Jay 178
Ross, Kenneth A. 99
Ross, Lawrence W., Jr. 203
Ross, Marion Dean 186

Ross, Susan J. 302
Rothbart, Mary K. 119
Rothbart, Myron 119
Rousseve, Ronald J. 229
Rowe, J. David 218, 221, 337
Roy, William N. 189
Rudy, Paul P. 32, 33, 42, 51
Ruff, Wallace M. 178
Runkel, Philip 119
Runyan, Anita 229, 242
Rupp, Kenneth 245
Ryan, C. B. 189
Ryan, Cheyney C. 106
Salisbury, Ralph J. 69
Saltzman, H. Royce 315
Sampson, Roy J. 203
Sandahl, David A. 171, 281
Sanders, J. T. 125
Sandin, Adolph A. 226
Sandoval, Juan A., Jr. 331
Santellanes, David A. 245
Santomier, James P. 282
Savage, Norman M. 80
Schaaf, Oscar F. 245
Schabtach, Eric 42
Schaeffer, Benson 119
Schaffer, Leslie L. D. 202
Scheer, Bradley T. 43
Schellman, F. Charlotte 52
Schellman, John A. 32, 52
Schey, Martha L. 282
Schlaadt, Richard G. 274
Schleef, Harold J. 202
Schleicher, Charles 113
Schmid, Peter 52
Schminke, Clarence 25, 245, 333, 353
Schmitt, Martin 331
Schmuck, Patricia A. 226, 233
Schoolcraft, Mary 181
Schreiner, Lois M. 331
Schroeder, Richard 223
Schulz, Jack E. 1
Schwartz, Thomas 223
Schwartzrock, Virginia 245
Schwarz, Robert H. 222
Scoles, Eugene F. 281, 302
Scott, Frances G. 233, 281
Scudder, Paul H. 52
Searl, Gary H. 76
Sears, Don W. 302
Sears, Douglas M. 43
Sederoff, Ronald 42
Seidel, Karen 33, 218, 221
Seitz, Gary M. 99
Sessions, Stanley K. 43
Service, Rose Marie 331
Seubert, Frederick J. 202
Severson, Herbert H. 233
Seybolt, Ottilie T. 138
Shellenbarger, Guy 245
Shellenbarger, Michael E. 171
Sheperd, George 255
Shepherd, John R. 138, 335, 353
Sheridan, George J., Jr. 92
Sherman, Peter R. 99
Sherman, Sharon Rochelle 69
Sherriffs, Ronald E. 138, 335
Sherwood, Irma Z. 69
Sherwood, John C. 69
Shimada, Izumi 161
Showalter, Kenneth 52
Shulman, Harvey J. 302
Sieradski, Allan J. 99
Siegel, Barry N. 65
Sierra, Adolfo 328
Sigerseth, Peter O. 283
Sigler, Marcia J. 331
Simeral, Margaret H. 65
Simic, Curtis R. 337, 353
Simmons, William Sherwin 162, 186
Simonds, Am G. 38
Simonds, Paul E. 38
Simpson, Paul B. 65
Simpson, William T. 52

Sims, Louis D. 52
Sisley, Becky L. 282, 337, 353
Sistrom, William R. 32, 42, 164
Slade, Rodney A. 331
Sloan, Katie L. 335
Sloat, Clarence 69, 97
Smit, Daniel 181
Smith, Donald T. 331
Smith, Everett G., Jr. 33, 76
Smith, Gerald R. 32, 42
Smith, Mary 15
Smith, Norman R. 203
Smith, Patricia 15
Smith, Richard J. 282
Smith, Robert 155
Smith, Robert E. 65
Smith, Robert W. 92
Smith, Scott 203
Smith, S. Harold 289
Smith, Warren E. 274
Smythe, Robert T. 99
Soderwall, Arnold L. 42
Soeder, Jay V. 189
Soehren, Helen L. 70
Soha, John W. 198
Sohlich, Wolfgang F. 127
Sommers, Larry 189
Soper, Davison E. 33, 109
Sorenson, Lloyd 92
Soule, Edmund F. 331
Speckman, Paul L. 99
Speich, J. R. 329
Spencer, Bob 21
Spicer, Barry 198
Sprague, Karen U. 32,42
Sprague, Vernon S. 283
Stahl, Franklin W. 32, 42
Standifer, Larry W. 282
Stannard, David R. 189
Staples, Lloyd W. 80
Starlin, D. Glenn 138
Stea, David 171
Steece, Bert M. 198
Steers, Richard M. 202
Stein, Richard L. 69
Steinhardt, Victor 315
Steinmetz, C. William 282
Stern, Frances Van Keuren 157, 186
Stern, Theodore 38, 155
Stern-Zweig, Leah 151
Stevenson, Richard C. 69
Steward, Jack W. 353
Stewart, W. R. 329
Stockard, Jean 133
Stone, Nonda P. 256
Stone, Stephen 315
Strange, Marliss 164, 166, 167
Strange, William C. 69
Straton, G. Douglas 125
Streisinger, George 32, 42
Street, Annabelle 223
Strom, Harold K. 195, 203
Struble, George W. 60
Sudmann, Robert 353
Summers, Emory F. 282
Sundberg, Norman 119, 215, 281
Sunderland, Ralph C. 337,353
Surles, Richard H., Jr. 303, 331
Sutherland, Colin E. 99
Suttle, John E. 226. 245
Swadener, Paul 200,281
Swan, Peter N. 33, 303
Swanson, Frederick 33
$\mathrm{S}_{\text {wift, }}$ Janet 334
Swinehart, Donald F. 52, 151
Sylwester, Robert A. 245
Szymanski, Albert J. 133
Tamiesie, Sue 15
Tamulonis, John 181
Tang, Stephen J. Y. 171
Tanner, Richard D. 337
Tate, Robert F. 99
Tattersall, James N. 65
Taylor, Donald S. 69

Teich, Nathaniel 69
TenBrinke, Dirk 245
Ten Eyck, Lynn F. 52
Tepfer, Sanford S. 42
Terwilliger, Nora 43
Ter williger, Robert C. 32, 42, 51
Thatcher, Edward P. 331
Thal, Marlene Soriano 315
Thibeau, J F. 138
Thomas, Donald L. 1, 337
Thomas, Kenneth R. 335
Thomas, Maxine S. 303
Thomson, Carmelita 215
Thompson, Andrew 229
Thompson, David A. 334
Thompson, Jon 171
Thompson, Paulette 331
Thompson, Thomas N. 113, 155
Thorpe, John 15
Thurber, Clarence E. 161, 215, 218, 281
Titus, Herbert W. 303
Tobey, Scott 336
Toelken, J. Barre 69
Toevs, Alden L. 65
Toll, William 92
Tollenaar, Kenneth 33, 218, 221
Toobert, Saul 229
Tonkinson, Robert 38
Toyama, Ryoko 155, 331
Travis, Donald M. 329
Trombley, Richard 315
Trotter, Robert M. 315
Troxel, Richard K. 282
Truax, Donald R. 99
True, Charlie 189
Truitt, Linda 337
Tubb, Monte 315
Tull, Donald S. 203
Tung, Rosalie S. Y. 155, 202
Tyler, Leona 119
Tynes, Theodore A. 220
Udell, Gerald G. 203
Udovic, Daniel 42
Ulrich, David B. 334
Ungson, Gerardo R. 202
Unthank, DeNorval, Jr. 171
Urban, Tom 20
Urquhart, Alvin 33, 76
Utsey, Glenda Fravel 178
Utsey, Michael D. 171
Vagner, Robert S. 316
Van Buskirk, James M. 99
van de Kragt, Alphons 34
Van Houten, Donald R. 133
Van Rossen, Donald P. 282
Van Rossen, Virginia A. 282
Van Schaack, George B. 43
Van Voorhis, Frances 274
Vander Schaaf, Elizabeth A. 186
Venketesan, M. 195, 203
Venolia, Carol 171
Vetri. Dominick R. 303
Via, Emory F. 336
Viegas, Kenneth 215
Vigna, Steven R. 42
Vincent, Andrew M. 189
Visscher, Pieter B. 109
Vitulli, Marie A. 99
Voegtlin, David 43
von Hippel, Peter H. 32,52
Vaughn, Sandra 20
Venturacci, Wanda 20
Vignoul, Edmund 1
Wade, Joseph D. 15
Wade, Louise Carroll 92
Waff, Harve S. 80
Wagner, David H. 43
Wales, R. Max 294
Walker, Hill M. 223
Walker, James Gary 289
Walker, Luise E. 331
Wang, Patrick 60

Wannier, Gregory H. 109
Ward, Lewis E., Jr. 99
Wasson, George B. 15
Watson, Donald A. 200
Watters, L. D. 329
Wattles, Marshall D. 65, 337, 353
Waugh, Ruth 256
Weatherhead, A. Kingsley 69
Weatherhead, Ingrid A. 86
Webb, Carl C. 294
Wegelin, Christof A. 70
Weill, Daniel 37, 80
Weisenstein, Greg 256
Weiss, Robert L. 119
Weissman, Nancy 223
Wellman, David T. 133
Werner, Neal 15
Westling, A. Mark 33, 219, 221
Westlund, Paul H. 316
Weston, James A. 43
Whitelaw, W. Edward 33, 65
Whitenack, Michael J. 333
Whitfield, Virginia Johnson 316
Wickelgren, Wayne 119
Wickes, George 69
Wiederholt, Kathleen M. 331
Wielesek, Richard A. 52
Wiese, Margaret J. 274
Wiitanen, Wayne 43, 334, 353
Wilhelm, Frederick S. 25
Wilkinson, Charles F. 303
Willard, Myra Maurice ii, 202, 337
Willard, Oliver M. 70
Williams, Astrid M. 86
Williams, Emmett R. 1
Williams, James 21
Williams, Jerry R. 138
Williams, Melissa 43
Willingham, William B. 335
Wilson, Neil 316
Wilson, Shirley J. 15
Wimber, Donald E. 43, 164
Wing, Lizabeth 316
Winter, Willis L., Jr. 294
Wisdom, John 106
Wish, John R. 204
Wisner, Herbert P. 43
Wimber, Doris R. 43
Wittnebert, Larry D. 138
Wixman, Ronald 76, 162
Wohlfarth, Irving 157
Wolcott, Harry F. 226
Wolfe, Jerry M. 99
Wolfe, Raymond G., Jr. 32, 52
Woo, Christina Joy 331
Wood, Hugh B. 226
Wood, Kenneth S. 256
Woodruff, Janet G. 283
Woods, Jean M. 86
Woods, William C. 316
Wooten, Edna P. 282
Wright, Charles R. B. 99
Wright, Leavitt O. 127
Wyant. June 15
Wyss, Loren L. 353
Yang, Lucia 63, 155
Young, Philip D. 38, 161
Youngen, Lois J. 282
Yurevich, Fruim 86, 162
Zach, Jan 189
Zadoff, Susan 270
Zaninovich, M. George 113, 162
Zavarzadeh, Mas'ud 69
Zeigler, L. Harmon 113
Zeller, Richard W. 223
Zigler, Calvin J. 245
Zimmerman, Robert L. 33, 109
Zuck, Virpi 86
Zweig, Arnulf 106

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[^0]:    Geol 401. Research. Credit hours to be arranged. A no-grade course.

[^1]:    Asian Studies
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    Joseph W. Esherick, Ph.D., Associate Professor of History.
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[^2]:    CI 507. Diagnosis and Design for Instruction.
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    CI 507. Teaching-Leaming Environment.
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    CI 507. Synthesis of Teaching Strategies.
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