

INVESTIGATING THE IMPACT OF GRADE
DISTRIBUTIONS AT THE UNIVERSITY OF OREGON

By

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This paper analyzes the characteristics and impact of grade distributions at the University of Oregon on student course selection. Data is analyzed both graphically and statistically. This project concluded there are clear and significant average grade discrepancies over different academic divisions at the University thus calling into question what it means to earn an average grade.

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Table of Contents

Executive Summary	1
Introduction	2
Literature Review	5
Proposed Goal & Hypothesis	8
Data	9
Methodology	11
Results & Analysis	17
Conclusion	31
Appendix	34
Scatter Variations	34
Lpoly Variations	45
As vs Ds & Fs Table	57
Regression Analysis Charts	59
Abbreviations	68
Works Cited	71
Data Cited	73

EXECUTIVE SUMMARY

This report analyzes the distribution of grades at the University of Oregon between the years of 1996 and 2014 and their relative impact on a number of variables including average grade point average and undergraduate course withdrawals. Substantial, and significant, differences among average grades awarded and grade inflation trends were present across different academic divisions between 1996 and 2014. Over the same period, an overall increase of GPA of .09 was found. Withdrawals from courses are strongly impacted by course average GPA, maximum classroom capacity, and the term a particular class was taken. The CAS-Natural Sciences had the lowest withdrawal rates per division; however, when analyzed at the course level, findings were inconsistently significant.

INTRODUCTION

As college enrollment increases across the nation, it is imperative to understand the implications that correspond with this trend. As more students are engaging in higher education, how will this change impact the average grades found at different universities. Are more students doing well in their courses? Are students currently more intelligent than their counterparts in previous years? Are classes getting easier for students due to technological resources or are teachers holding students accountable to more information due to this newfound accessibility to information? Some of these questions have concrete answers yet others have no clear way of answering this question.

Grade inflation has become endemic across the nation as evidenced in the work produced on GradeInflation.com¹. Between the years of 1983 and 2013, public academic institutions have increased their average GPAs from 2.75 to 3.05. Over the same span, private academic institutions have increased their GPA from 2.95 to beyond 3.30. Public and private institutions experience GPA increases at almost symmetric rates. However, private institutions have a higher GPA baseline, and consequently, end at a significantly higher average GPA as well.

This discrepancy has been documented at the national level but a case study for the University of Oregon was in order. With such a difference between public and private colleges, vast differences at a micro-level were also considered. Anecdotally, students at the University of Oregon claim certain majors and classes are substantially

¹ Rojstaczer, Stuart. "National Trends in Grade Inflation, American Colleges and Universities." *National Trends in Grade Inflation, American Colleges and Universities*. N.p., 29 Mar. 2016. Web. 05 May 2016.

more difficult than others yet grading trends inter-departmentally do not reflect this. The grades received oftentimes carry different weight depending on when a class was taken, who was teaching it, and what major the course falls under.

Students taking Natural Science courses often find the effort required to receive an A is substantially greater than the effort required to receive the same grade in a Humanities course. Transcripts have no way of depicting this variation at the course, department, or college level. Furthermore, from a student's perspective, there is no way of knowing what the average GPA is for a department nor any way of reflecting this on their transcript. Even if the average GPA was documented on each student's transcript, there is no way of knowing the amount of time spent on the particular class.

Furthermore, when applying to graduate institutions, majors with higher GPAs may receive different, and preferential, treatment in comparison to majors with lower average GPAs. This would end up poorly reflecting the University of Oregon itself as undergraduate GPAs would not adequately reflect post-graduate potential. The goal of this study is to shed light on average GPAs across different majors as well as be an initial step in creating a relative academic ranking scale on future transcripts.

The remainder of this report will be focused on reflecting grade distribution trends. Furthermore, this project was completed to better understand the impact that grades have on students' course choices. The data for these course choices and grade distributions will be analyzed in graphs, tables, and regressions. Variables including term, year, average GPA, class size, course level, online options, general education requirements, class time, and number of credits are all included within the regressions

to uncover relative impact on course retention rates and course GPA. A better understanding of academic grading tendencies is identified within this study.

LITERATURE REVIEW

There are no current case studies involving the direct relationship between grade distribution and course selection. However, in Peer Effects in Education: How Might They Work, How Big Are They and How Much Do We Know Thus Far?² Bruce Sacerdote shows evidence “that students tend to shy away from courses and degrees that more commonly give out low grades.” Sacerdote concludes that every university should include academic labels, or parameters, suggesting high-level and low-level majors in an effort to help elucidate academic course difficulty. This way, courses or academic divisions with lower than average GPAs, institutionally, would have their GPAs recognized for the difficulty they reflect.

Trends in Undergraduate Grades Awarded at the University of Oregon³ relays the average grades over the timeframe of 1992-2004 through basic summations in tabular format. Over this period, the percentage of A grades (A+, A, & A-) increased by 10.3% while the combination of A and B grades increased by 6.9%. The percent change of A grades being awarded was higher at the 300 and 400 level courses, specifically, 11.8% and 11.7%. Overall, GPA rose by 5.1%.

The Undergraduate Council identifies the presence of inflation but is does not go as far as interpreting the cause of the results. This study documents the change in percent of As, Bs, Ds & Fs, change in overall GPA, and nominal change in incoming

² Sacerdote, Bruce. "Peer Effects in Education: How Might They Work, How Big Are They and How Much Do We Know Thus Far?" *Science Direct*. ELSEVIER, 2011. Web.

³ Undergraduate Council. *Trends in Undergraduate Grades Awarded at the University of Oregon 1992-2004*. Tech. Eugene: U of Oregon, 2006. Print.

students SAT scores. [Note: Only math SAT scores have been found to be indicative of collegiate academic success.⁴]

Factors Related to University Grade Inflation⁵ analyzed six potential influences on grade inflation. The study used aggregate data from 197 institutions across the nation. Birnbaum first identified significant grade inflation of .324 between the years of 1965 to 1973. GradeInflation.com further validates these findings. Once grade inflation was identified, six hypothesis for the root of grade inflation were tested. Five of these hypothesis, including “that grade inflation may be a result of the entering of more able high school students, of increased student achievement, of changes in sex distribution and student majors, or of factors in courses taken by students” were found to not be significant in impacting average GPA. The sixth option, “grade inflation is related to changes in grading policies”, was statistically supported by these results. This source claims grade inflation is a trend that has been occurring over the latter part of this century and is due to changes in grading policies among institutions.

Grade Inflation, Real Income, Simultaneity, and Teaching Evaluations⁶ concluded that there are real, and significant impacts from income and teaching evaluations on grade inflation. Upon implementation of teacher evaluations, there is a positive increase in average GPA. To better understand the impact on grade inflation, variables including present grade, expected grade, instructor quality, course quality,

⁴ Rothstein, Jesse M. "College Performance Predictions and the SAT." *Journal of Econometrics* 121.1-2 (2004): 297-317. Web.

⁵ Birnbaum, Robert. "Factors Related to University Grade Inflation." *The Journal of Higher Education* 48.5 (1977): 519-39. *JSTOR [JSTOR]*. Web.

⁶ Nelson, Jon P. "Grade Inflation, Real Income, Simultaneity, and Teaching Evaluations." *The Journal of Economic Education* 15.1 (1984): 21-37. *JSTOR*. Web. 09 June 2016.

GPA average, proportion of liberal arts majors, response rate, introductory course (dummy), intermediate theory course (dummy), class size dummy (50+), class size dummy (250+), class time dummy (for undesirable times), weekend class (dummy), instructor years of experience, access to instructor, instructors interest in material, instructors organizational skills, workload, exam fairness, and real income were analyzed. These variables were calculated by finding the mean of student responses on teacher evaluations and helped contextualize the findings.

PROPOSED GOAL & HYPOTHESIS

This project has two main goals. First, this experiment is intended to create an extensive body of literature surrounding GPA inflation at the University of Oregon. Secondly, this research will help show the impact of inflated grades on withdrawal rates among different courses. Grade distribution averages, grade inflation statistics over time, as well as tables providing percent changes of As will all be created in a manner that will allow people with little math or economics backgrounds to understand. Creating an understandable and widely accessible set of literature will be vital to this projects success.

This thesis revolves around the questions of *how impactful are grading discrepancies at UO, what impacts grading differences, and how does this variability impact retention rates through different courses or college divisions?* Prior to the tests being run, it is hypothesized that (1) grading discrepancies will be prevalent over all subjects at UO, (2) courses starting early in the morning or are located in large lecture halls will have lower average grades awarded, and (3) if the average grade for a particular course is higher than that of the university average, then the withdrawal rates should be significantly lower.

DATA

The University of Oregon Registrar provided the two fundamental datasets used in this analysis, Courseinfo.dta and Coursegrade.dta. Courseinfo.dta is an excel spreadsheet including fifty-one thousand course observations including formation regarding subject, course number, course title, number of credits, CRN, number of seats available, maximum number of students permitted, Time, Day, Location, Instructor, Term, Year, if it fulfilled a general education requirement, which general education requirement would be fulfilled and a supplemental variable called IdentifyingCourse. This dataset gave a background to all courses, discussions, and labs taught at the University of Oregon from the year 1996-2015.

The second data set used was Coursegrade.dta. Coursegrade.dta included seventy-nine thousand observations. Each observation included the variables: term number, quarter, IdentifyingCourse, subject, number, CRN, Instructor, AP, A, AM, BP, B, BM, CP, C, CM, DP, D, DM, F, P, N, Other, W, and TNW. This data set also included summer courses and graduate courses which accounts for the greater number of observations present in comparison to Courseinfo.dta. For the analysis, these data points would be cleansed from the excel spreadsheets.

A minor shortcoming of the spreadsheets was the need for student anonymity. The OUS implemented two rules regarding redacting student grade information. First, all grades must be redacted if a course enrolls fewer than ten students by the end of the term. Second, as described by Jim Blick, “the distribution of grades needs to be such that a person would have to know the grades of at least 6 students in order to determine someone else's grade. This means we cannot display distributions where most of the

grades are the same”⁷. Courses that do not follow these requirements had their grade distributions redacted and couldn’t be used in this research. This tended to have the greatest impact on 400 level major specific courses.

Supplemental data sources used for consultation include Undergraduate Grade Distributions (%) by Level for the 2014/2015 Academic Year and Distribution of Grades Awarded to Undergraduates, by Department. The first dataset is a division of every subject taught at the University of Oregon separated into lower and upper division brackets, and the percentage of letter grades awarded. The second dataset shows the percentage of students awarded particular grades per department for the fall terms of 2012, 2013, 2014, and 2015. These two files were beneficial by creating a baseline for every course and their relative grade distributions but do not provide information on which courses were redacted from their aggregate summations.

⁷ "Grade Distributions for Fall 2012-2015." Message from Jim Blick. N.d. E-mail.

METHODOLOGY

The first step in analyzing the grade distributions at the University of Oregon is to merge Coursegrade.dta with Courseinfo.dta to create a single dataset with aggregated observations and therefore permitting more effective analysis. To prevent duplication in the spreadsheet, the variable IdentifyingCourse was created as a combination of subject, course number, CRN, term, and year. IdentifyingCourse was absolutely unique for each observation including graded discussions sections that had the same CRNs. Upon creation of this variable, both sets of data can be merged 1:1 on Stata, creating a single master dataset.

In an effort to clean and refine the data, all courses with redacted grade data based on privacy restrictions were dropped from the dataset. Courses numbered over 500 and Summer courses were dropped. For this experiment, a normal academic cycle included Fall, Winter, and Spring.

Once there is a single dataset with all the observational data, a *destring* command must be performed. This command actively changes every numerical observation from having symbolic value to numerical value. This was completed through a *destring, replace* command on Stata therefore allowing quantifiable samples to be analyzed. This was followed by the creation of two new variables. The first being TS: total number of students receiving a grade other not including those who took a class for pass or no pass. This was generated through the summation of all grades awarded. Having this new variable allowed for the calculation of grade propensities defined as AP1p, A1p, AM1p, BP1p, B1p, BM1p, CP1p, C1p, CM1p, DP1p, D1p, DM1p, and F1p. AP1p is the percentage of A+ grades awarded and is defined as AP/TS

(number of A+ grades per class divided by total number of grades awarded per class).

This same method was repeated for the remaining grades hereby creating new variables that would define the percentage of certain grades earned in a course.

Knowing grade propensities, a variable for average GPA (avgGPA) was created via the function:

$$(4.3 \times AP1p) + (4.0 \times A1p) + (3.7 \times AM1p) + (3.3 \times BP1p) + (3.0 \times B1p) + (2.7 \times BM1p) + (2.3 \times CP1p) + (2.0 \times C1p) + (1.7 \times CM1p) + (1.3 \times DP1p) + (1.0 \times D1p) + (0.7 \times DM1p).$$

Of the numbers in each parentheses, one number stands for the relative points awarded for a particular grade, and the other number stands for the percentage of this grade awarded per class.

At this point, the data set includes percentage of grades awarded per class, total number of students earning a particular grade per class, average GPA per class, as well as the descriptive information about the course previously mentioned.

Once the Do-File is created, and the raw data made available, scatterplots were created to better understand the grade change trends. Initially, scatter plots with linear trend lines imposed were created using the command:

```
twoway (lfit avgGPA Year1 if Subj=="EC") (scatter avgGPA Year1 if Subj=="EC").
```

EC, stands for Economics, and is only a stand-in to represent the formula and how it is used. This process was repeated for the top sixty-three enrolled subjects at the

University of Oregon. Many of the courses, were not represented well by the linear trend lines causing a need for the implementation of a multivariable alternate.

To improve the clarity of the results, each scatterplot was remade with an l-poly trend-line. L-poly trend lines, also known as Kernel weighted local polynomial regressions, are most often used when there are noisy observations with no known or clearly observed scatter trend. This trendline follows the previous observation as well as the following observation that turns out to have curved fitted regression lines. L-poly bwidth are set to one as a standard but wanting to ensure a visually appealing, and effective, graph, I set bwidth to two. This change in settings made the trend-line follows the scatterpoints more loosely, creating a smoother trend line. A bwidth of one puts more emphasis on point-by-point progression as opposed to overall trends of the complete data set.

Once these graphs were created, l-poly graphs were created for academic divisions. Academic divisions included College of Arts and Sciences, Natural Science, Social Science, and Humanities, as well as School of Business, School of Education, School of Music, School of Journalism, and the School of Architecture & Allied Arts. The University of Oregon Office of Registrars provided information on which courses fell under each division. These new graphs created a better understanding of the results on a macrolevel. Aggregating all the grades awarded per year and calculating the average GPA by the function previously shown created University of Oregon average GPA graph.

Tables individualized by division relayed the percent of As and Ds & Fs awarded to students over a particular time frame. Each observation was indicative of a

time frame between four and five years. Mean values were calculated and then a simple difference was found between the first time span and the last time span.

Prior to the main regressions, regressions analyzing each college were completed to see quantifiable changes in average grading trends. The Stata code *reg avgGPA NSdiv HUMdiv AAAdiv BAdiv Jdiv MUSdiv year* was utilized to do so. The College of Social Sciences was excluded from the regression to serve as the baseline for the coefficients. This college was chosen because it has the greatest portion of the student body enrolled.

For this thesis, there were three main focuses the regressions were intended to answer. The first regression sets showed how grade inflation was playing a role in the grades awarded per course at the University of Oregon. The second regression sets analyzed influences on average GPAs across majors, colleges, and the university. The third regression analyzed what impacted withdrawal rates at different levels at the University of Oregon.

The first regression focused on finding the difference in predicted GPA for a course and the actual reported GPA for a course. The variables year, number of credits, a small class size (classes with less than fifty students), a large class size (classes with more than two hundred students), term, class level, course medium, and relative time of day were used to create the new variable predicted GPA. Once all of these variables were taken into account, a predicted GPA would be calculated. The difference between the predicted GPA and the actual GPA could be either positive or negative with positive values showing that there is an estimated grade elevation of the particular output and negative values suggesting grades were awarded higher than predicted. This equation is

not suggesting grade inflation is occurring rather it is suggesting that there is a difference in projected overall GPA and actual awarded GPA based on the trends found on the course statistics. [Note: The variable year was altered to represent the difference between 2005 and the year in particular to make the coefficients cleaner.]

The second regression focused on the impact of different variables on GPA at the major level. The Stata command used to do this was: *reg avgGPA AAD-PS REES-SWED late early year large small threecr fivecr C200 Cupper Winter Spring online*. To ensure that the regression didn't violate any rules regarding multicollinearity, the major PSY was excluded from the regression. Psychology was chosen to be the base-level because it has the greatest student enrollment at UO. C100, Fall, and in-class were also exempted to act as comparative baselines for the regression. This was followed by complementary regressions analyzing the impact of these variables on the respective colleges at UO and at UO as a whole.

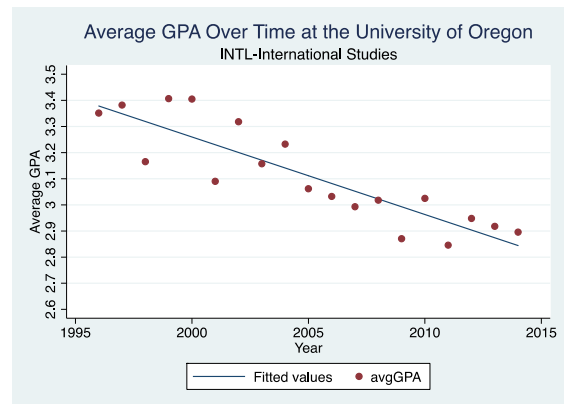
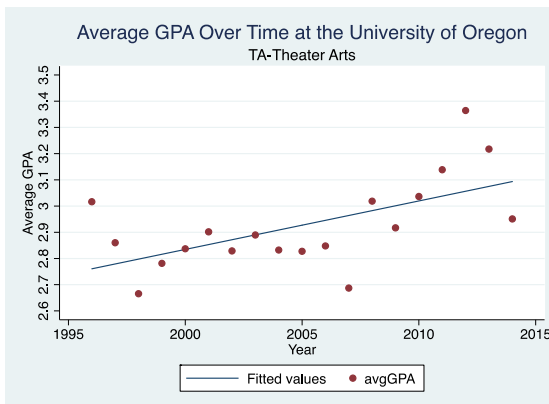
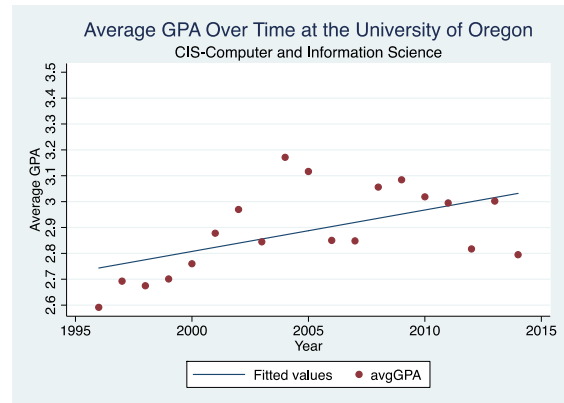
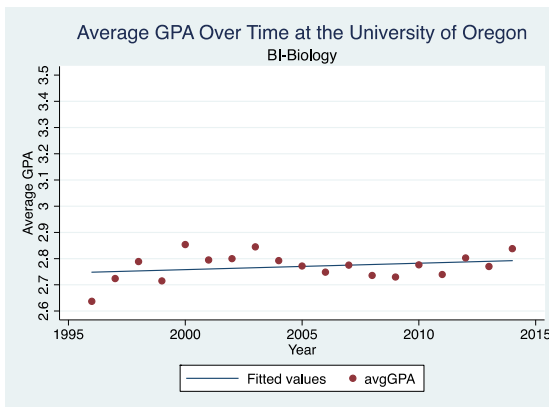
The results from these regressions led to the interest of analyzing the difference between courses that could fulfill general education requirements and major track classes. Average GPA per subject, college, UO, as well as the implications of other variables on the average GPA of GE courses are also analyzed using the same regressions as previously mentioned but with the analytical exception being that any course that was not a course that could fulfill UO GE requirements was dropped from the datasets.

The third regression focused on the relative impacts on number of withdrawals from a course. The regression used for this was *reg W avgGPA Winter Spring C200*

Copper Max, absorb(Year). This regression analyzes the impact on withdrawals of other variables.

RESULTS

Of the top sixty-three most enrolled courses at the University of Oregon, many different trends appeared. Following are four graphs that all show unique and fundamentally different grade change trends:

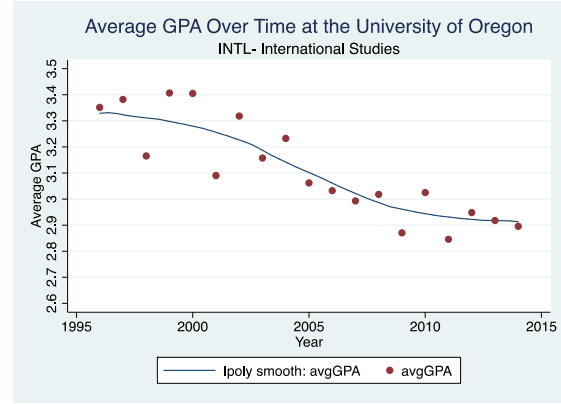
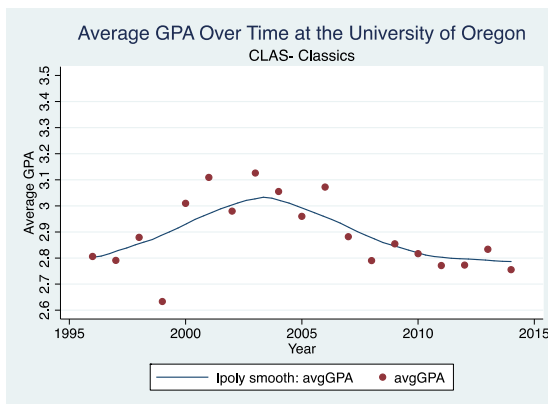
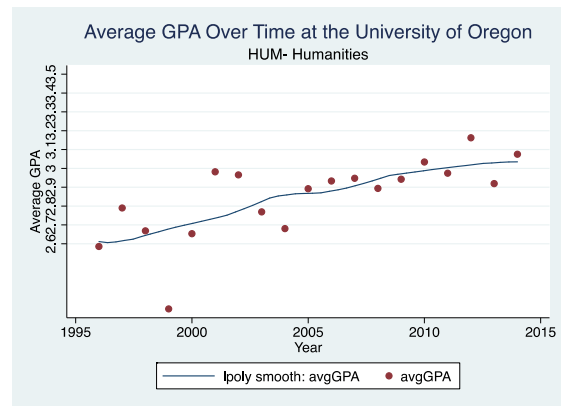
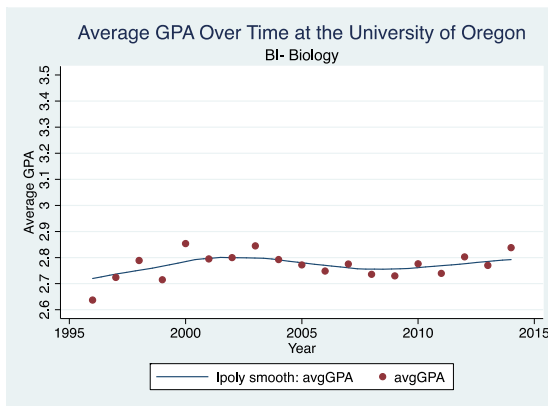


The average GPA of Biology courses tend to stay relatively constant between the years of 1995 and 2014 (about 2.77). The average GPA of Computer and Information Sciences courses tends to increase but the linear trend line doesn't appropriately represent the assorted yearly average GPA points (about 2.6-2.9). International Studies shows a significant decrease in course average GPAs dropping from approximately 3.37 in 1995 to about 2.90 in 2014. Theater Arts shows an increase in average GPA but the

trend seems to have ups and downs and is not best represented by a linear trend line.

These graphs, random in selection, are indicative of the overall grade change trends, or lack thereof among the other fifty-nine graphs. [Note: The remaining 59 graphs can be found in the Appendix.]

In an effort to combat the ineffectiveness of linear trend lines, the same data was used to create l-poly trend lines; thus, creating a more visually appealing figure. Below are several examples of how the l-poly implementation allowed for a greater ease in understanding and a better representation of the data.

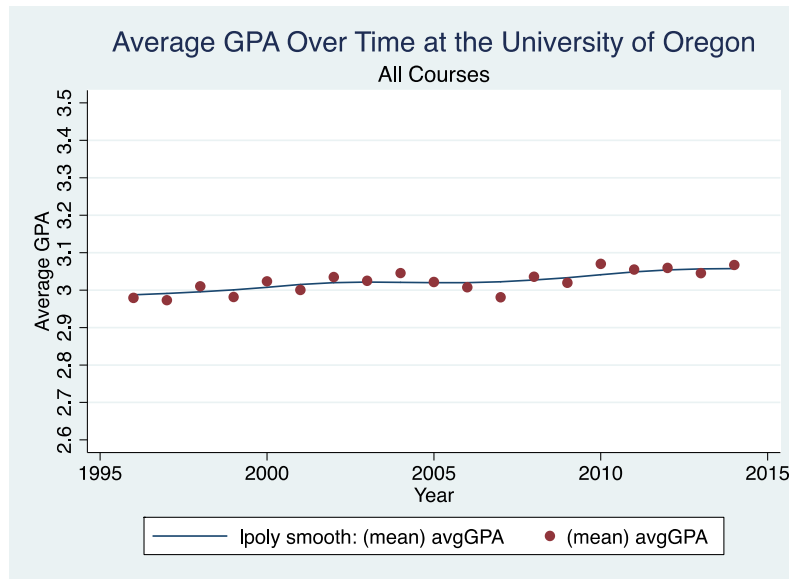


The l-poly imposed scatterplots are more visually appealing and follow the scatterpoints more representatively than the linear fit line. Appearances aside, no single trend was

visible cross Biology, Humanities, International Studies, or Classics. Academic grade trends varied immensely.

Fearing that there would be no clear academic trends regardless of the methods used to graphically represent the average GPA, I took a step back and rather than analyze individual courses, I analyzed academic divisions. One at a time, all observations that were outside of a particular academic division were dropped. These academic divisions came in the form of College of Arts and Sciences Natural Science, Social Science, and Humanities, as well as School of Business, School of Education, School of Music, School of Journalism, and the School of Architecture & Allied Arts. With the exception of the College of Education, each of these divisions seemed to follow a particular trend fairly consistently. These trends, which can be found in the Appendix on pages 53/54, typically remained fairly constant with minor decreases in GPA being the most common (decrease of under .05 GPA over the time frame of 1996-2014). College of Arts & Sciences-Humanities experienced the greatest average GPA increase, of all the academic divisions, and experienced a jump in GPA of .13 from 3.08 to 3.21.

Following college division trends, came the need for understanding the University trends which can be seen below over the period of 1996-2014:



This trend-line showed that there is a clear increase in GPA at the University of Oregon over the years of 1996-2014. The average GPA in 1996 was a 2.98 while the average GPA in 2014 was a 3.08. This graph evidenced that the university as a whole was experiencing an overall grade inflation trend on par with other universities across the nation.

This finding created a need to understand the change in As and Ds & Fs awarded among different academic divisions. This was done so by collapsing observations save the key subjects that make up the division and their respective average GPA per year. The results tended to support previous finding that average GPAs at the University of Oregon are increasing. Overall, the percentage of As awarded increased, and the percentage of Ds and Fs changed relatively nominally. Realistically, this change of .05 can be considered as insignificant as the number is so small relative to the numbers accounted for.

Table 1: Percent Change of A vs D/F Awarded at UO

Unit	Year Span	Total A (%)	Total D/F (%)
Overall	1996-2000	34.59	6.88
	2001-2005	37.18	6.68
	2006-2010	36.00	7.23
	2011-2014	35.55	6.93
	Percentage Change	(+) .96	(+) .05

Despite the overall trend suggesting that the percent of As increased at the University-level, when analyzing per division, only the CAS-Social Science, CAS-Humanities, and AAA- College of Architecture and Allied Arts experienced increases in percentage of As awarded. The CAS-Natural Science, School of Business, School of Education, School of Journalism, and School of Music each experienced decreases in the number of As awarded over the same time frame. Results for these charts can be found in the Appendix on pages 55-57. Because the aggregate percentage of As increased, the CAS-Social Science, CAS-Humanities, and AAA- College of Architecture and Allied Arts have a greater overall impact based on number of students enrolled. Note that despite changes in percentage of As being awarded did not change substantially, the number of students enrolled in different colleges did change and as each college awards different percentages of As, University-wide trends were impacted.

The results from the college-division based average GPA regression can be seen below:

Table 2: Average GPA Regressions at the College Level

Source	SS	df	MS	Number of obs	=	20,523
Model	402.857644	7	57.551092	F(7, 20515)	=	502.04
Residual	2351.72062	20,515	.1146342	Prob > F	=	0.0000
				R-squared	=	0.1463
				Adj R-squared	=	0.1460
Total	2754.57826	20,522	.134225624	Root MSE	=	.33858

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
NSdiv	-.1621616	.007008	-23.14	0.000	-.1758979	-.1484253
HUMdiv	.1872338	.0055966	33.46	0.000	.176264	.1982035
AAAdiv	.0490237	.0123452	3.97	0.000	.0248262	.0732212
BAdiv	-.3283335	.0267022	-12.30	0.000	-.3806719	-.2759951
Jdiv	-.1412551	.0186203	-7.59	0.000	-.1777523	-.1047579
MUSdiv	-.171693	.0176693	-9.72	0.000	-.2063263	-.1370597
YEAR	.0010032	.00043	2.33	0.020	.0001604	.001846
_cons	3.009944	.0042834	702.69	0.000	3.001548	3.01834

Based on having the Social Science division being exempted from this regression, the coefficients signify the GPA point differential between the particular division and Social Sciences. For example, the -.32 coefficient for Business means that the average GPA for a Social Science is .32 GPA points more than that of a Business GPA. The constant of 3.00 shows that is the baseline average GPA for Social Sciences disregarding year.

The results from the predicted GPA vs average GPA regression can be seen below:

Table 3: Predicted GPA vs Average GPA

Subj	mean(predic~a)	mean(avgGPA)	mean(GPAdiff)
AAD	3.06	3.24	0.18
ANTH	2.98	2.91	-0.07
ARB	3.33	3.34	0.01
ARCH	3.19	3.43	0.24
ARH	2.91	2.82	-0.09
ART	2.74	2.78	0.04
ASIA	3.10	3.27	0.17
ASL	3.17	3.34	0.17
ASTR	2.79	2.85	0.06
BA	2.70	2.68	-0.02
BE	2.73	2.52	-0.21
BI	2.84	2.79	-0.05
CAS	3.18	3.47	0.30
CH	2.76	2.77	0.02
CHN	3.20	3.31	0.10
CINE	3.28	3.39	0.11
CIS	2.84	2.88	0.04
CLAS	3.02	2.89	-0.12
COLT	3.15	3.22	0.07
DAN	3.14	3.24	0.10
EALL	2.94	3.17	0.23
EC	2.82	2.74	-0.08
EDST	2.84	3.03	0.19
EDUC	2.79	2.73	-0.06
ENG	3.18	3.09	-0.09
ENVS	2.82	2.79	-0.03
ES	2.97	3.03	0.07
FHS	2.82	2.78	-0.04
FLR	3.19	3.14	-0.05
FR	3.20	3.28	0.07
GEOG	2.91	2.90	-0.02
GEOI	2.97	2.93	-0.04
GER	3.14	3.26	0.12
GRK	3.27	3.57	0.31
HBRW	3.16	3.34	0.18
HC	3.18	3.47	0.29
HIST	3.02	2.93	-0.09
HPHY	2.77	2.79	0.02
HUM	2.97	2.92	-0.05
INTL	3.01	3.13	0.12
ITAL	3.18	3.16	-0.03
J	2.95	2.87	-0.08
JDST	3.17	3.33	0.16
JPN	3.31	3.25	-0.06
KRN	3.32	3.55	0.23
LA	2.85	3.06	0.20
LAS	3.10	3.15	0.05
LAT	3.27	3.33	0.06
LING	2.86	2.96	0.10
MATH	3.10	2.85	-0.24
MUJ	2.91	2.52	-0.40
MUS	2.91	2.88	-0.03
NORW	3.16	3.10	-0.06
PHIL	2.93	2.99	0.06
PHYS	2.83	2.93	0.10
PORT	3.31	3.50	0.19
PPPM	2.89	3.06	0.17
PS	2.87	2.82	-0.05
PSY	2.83	2.81	-0.02
REES	3.27	3.60	0.33
REL	3.06	3.01	-0.05
RUSS	3.24	3.44	0.20
SCAN	3.12	3.26	0.14
SOC	2.93	2.90	-0.03
SPAN	3.20	3.30	0.10
SWAH	3.34	3.19	-0.15
SWED	3.17	3.35	0.19
TA	2.95	2.96	0.01
WGS	3.13	3.17	0.04

About half of the average GPAs tend to be within .1 points away from their predicted value. Values of this degree wouldn't necessarily constitute as grade inflation but rather a value within a 95% confidence interval. Positive values constitute having an actual GPA higher than the forecasted GPA. Courses with positive values of .20 or more,

including Honors College, Greek, Russian and Eastern European Studies, Greek, and Educational Studies, mostly tend to be Humanities courses. Natural Science courses, including Biology, Chemistry, or Math, have values of -.05, .02, and -.24, respectfully. This would suggest that with the exception of Chemistry, these courses tend to have lower average grades than the model would have predicted. This could be due to an influence not captured by the variables used, a difference in grading policy or a number of other possibilities.

The second major regression ran was in an effort to see what impacted average GPA. The command ran on Stata can be seen below, along with excerpts from the table:

Table 4: Average GPA Regression at the Course Level

Source	SS	df	MS	Number of obs	=	20,523
Model	1232.17483	78	15.7971132	F(78, 20444)	=	212.14
Residual	1522.40343	20,444	.074467004	Prob > F	=	0.0000
				R-squared	=	0.4473
				Adj R-squared	=	0.4452
Total	2754.57826	20,522	.134225624	Root MSE	=	.27289

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
AAD	.2311209	.0185748	12.44	0.000	.1947128 .267529
ANTH	-.0631074	.0158758	-3.98	0.000	-.0942252 -.0319896
ARB	.1039428	.0481526	2.16	0.031	.0095599 .1983257
ARCH	.1613147	.2737794	0.59	0.556	-.3753149 .6979443
ARH	-.1051992	.0192548	-5.46	0.000	-.1429401 -.0674583
ART	.0338383	.0492328	0.69	0.492	-.062662 .1303386
ASTA	.1828494	.0870558	2.10	0.036	.0122131 .3534857
ASL	.2139966	.0363211	5.89	0.000	.1428043 .2851888
ASTR	.0572911	.0211936	2.70	0.007	.01575 .0988322
BA	-.0326939	.0250981	-1.30	0.193	-.0818882 .0165005
BE	-.2252273	.1581035	-1.42	0.154	-.5351227 .0846682
BI	-.0655639	.0183637	-3.57	0.000	-.1015583 -.0295696
CAS	.3607716	.06247	5.78	0.000	.2383254 .4832177
CH	-.0092969	.021358	-0.44	0.663	-.0511603 .0325666
CHN	.1567761	.0209148	7.50	0.000	.1157815 .1977707
CINE	.1572715	.1933473	0.81	0.416	-.2217048 .5362477
CIS	.025438	.020495	1.24	0.215	-.0147339 .0656099
CLAS	-.122718	.0270513	-4.54	0.000	-.1757408 -.0696952
COLT	.1130123	.0180059	6.28	0.000	.0777192 .1483053
DAN	.1311526	.0296403	4.42	0.000	.0730553 .1892499
EALL	.2281201	.0593503	3.84	0.000	.1117886 .3444515
EC	-.1049425	.01609	-6.52	0.000	-.1364801 -.0734049
EDST	.1840985	.0335254	5.49	0.000	.1183861 .2498109
EDUC	-.0790817	.1038538	-0.76	0.446	-.2826435 .1244802
ENG	-.0401918	.0136056	-2.95	0.003	-.0668599 -.0135237
ENVS	-.0484556	.0306609	-1.58	0.114	-.1085533 .0116421

ES	.0276136	.026515	2.74	0.006	.0206421	.1245851
FHS	-.0684079	.1038592	-0.66	0.510	-.2719802	.1351645
FLR	-.0159427	.0362842	-0.44	0.660	-.0870626	.0551773
FR	.1234583	.0151727	8.14	0.000	.0937185	.153198
GEOG	-.0310282	.0181765	-1.71	0.088	-.0666556	.0045993
GEOL	-.0289213	.0166922	-1.73	0.083	-.0616393	.0037967
GER	.1565122	.0169956	9.21	0.000	.1231994	.189825
GRK	.3586248	.1933483	1.85	0.064	-.0203533	.7376029
HBRW	.2316748	.1370403	1.69	0.091	-.0369351	.5002847
HC	.3444631	.0151039	22.81	0.000	.3148582	.374068
HIST	-.0854013	.014598	-5.85	0.000	-.1140146	-.0567881
HYPHY	.0078153	.0513185	0.15	0.879	-.0927731	.1084036
HUM	-.0362677	.0272686	-1.33	0.184	-.0897163	.017181
INTL	.126973	.0236232	5.37	0.000	.0806696	.1732763
ITAL	.0210871	.0192146	1.10	0.272	-.0165751	.0587492
J	-.0924569	.0184457	-5.01	0.000	-.128612	-.0563019
JDST	.1985986	.041131	4.83	0.000	.1179786	.2792185
JPN	.0201053	.0220765	0.91	0.362	-.0231665	.0633771
KRN	.3210833	.0440495	7.29	0.000	.2347428	.4074238
LA	.1755285	.0714145	2.46	0.014	.0355504	.3155067
LAS	.0920526	.0739294	1.25	0.213	-.0528549	.2369602
LAT	.1039294	.0411546	2.53	0.012	.0232631	.1845957
LING	.0824886	.0194708	4.24	0.000	.0443243	.1206529
MATH	-.2146561	.013438	-15.97	0.000	-.2409956	-.1883166
MUJ	-.4299697	.0427418	-10.06	0.000	-.513747	-.3461923
MUS	-.0479487	.0185192	-2.59	0.010	-.0842479	-.0116496
NORW	-.0088971	.1121377	-0.08	0.937	-.2286959	.2109018
PHIL	.0590034	.0187608	3.15	0.002	.0222308	.0957761
PHYS	.0858589	.0175746	4.89	0.000	.0514112	.1203066
PORT	.2802448	.0778152	3.60	0.000	.1277208	.4327689
PPPM	.1541545	.043229	3.57	0.000	.0694222	.2388868
PS	-.0668456	.0155017	-4.31	0.000	-.0972302	-.0364609
REES	.3762929	.2731606	1.38	0.168	-.1591237	.9117095
REL	-.03769	.0214247	-1.76	0.079	-.0796841	.0043041
RUSS	.2607131	.0246592	10.57	0.000	.2123792	.3090471
SCAN	.1610698	.0294807	5.46	0.000	.1032853	.2188543
SOC	-.043867	.0167864	-2.61	0.009	-.0767696	-.0109643
SPAN	.1485552	.0130634	11.37	0.000	.1229498	.1741605
SWAH	-.0515895	.0812732	-0.63	0.526	-.2108915	.1077125
SWED	.2335702	.0972885	2.40	0.016	.0428769	.4242634
late	.0481711	.0217642	2.21	0.027	.0055115	.0908306
early	-.0096907	.0052377	-1.85	0.064	-.019957	.0005756
YEAR	.0006062	.0003564	1.70	0.089	-.0000925	.0013048
large	-.1190805	.0085402	-13.94	0.000	-.1358199	-.102341
small	.2760507	.006038	45.72	0.000	.2642157	.2878857
threecr	.0447466	.0186708	2.40	0.017	.0081503	.0813428
fivecr	.1182314	.0167215	7.07	0.000	.0854559	.1510069
C200	.014019	.0064403	2.18	0.030	.0013956	.0266425
Cupper	.1175235	.0067511	17.41	0.000	.1042909	.1307561
Winter	.0099214	.0046146	2.15	0.032	.0008764	.0189663
Spring	.0142355	.0046966	3.03	0.002	.0050297	.0234413
online	-.0836653	.0121025	-6.91	0.000	-.1073871	-.0599435
_cons	2.820131	.0126649	222.67	0.000	2.795306	2.844955

As noted previously, the subject of Psychology has been excluded from the dummy variables to act as a base comparison. Furthermore, the majority of these variables and respective coefficients are significant at the 95% confidence level. This regression shows that the coefficient for the economics dummy variable is -.10 and is significant at the .05 level meaning that on average, by being enrolled in an economics course, ones GPA will result in being .1 points lower than if that person was in a Psychology class. The additional variables at the end of the output will also play a role on how course

average GPA will be calculated. The Winter and Spring dummy variables are significant at the .05 level. By being enrolled in a course during the Winter term, ones GPA will be .099 points higher than that of someone who is enrolled in Fall. Likewise, ones GPA will be .014 points higher when enrolled in Spring instead of Fall. This would suggest that annually, the lowest GPAs come during the Fall term. C200 and Cupper are both significant at the .05 level. C200 has a coefficient of .014 meaning that on average, being enrolled in a 200 level course will result in a GPA of .014 higher than that of someone enrolled in a 100 level course. Furthermore, this is more impactful at the 300+ course level as the coefficient is .118 suggesting that average GPA is .118 points higher at the 300+ course level than it is at the 100-200 level.

When analyzing the average GPA by the set of captured variables and college divisions, we find the following data:

Table 5: Average GPA Regression at the College Level with Extensive Variables

Source	SS	df	MS	Number of obs	=	20,523
Model	962.693463	18	53.4829702	F(18, 20504)	=	611.99
Residual	1791.8848	20,504	.087391963	Prob > F	=	0.0000
				R-squared	=	0.3495
				Adj R-squared	=	0.3489
Total	2754.57826	20,522	.134225624	Root MSE	=	.29562

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
late	.0698786	.0232798	3.00	0.003	.0242483 .1155088
early	-.0095802	.0056088	-1.71	0.088	-.0205739 .0014136
YEAR	.0009411	.0003815	2.47	0.014	.0001933 .0016889
large	-.109306	.0086549	-12.63	0.000	-.1262703 -.0923417
small	.3267389	.0050822	64.29	0.000	.3167774 .3367003
threecr	.0175088	.0198997	0.88	0.379	-.0214963 .0565138
fivecr	.1384176	.0106539	12.99	0.000	.1175352 .1593
C100	-.0128721	.0061342	-2.10	0.036	-.0248956 -.0008487
Cupper	.0656607	.004905	13.39	0.000	.0560465 .0752749
Winter	.0056618	.0049899	1.13	0.257	-.0041187 .0154424
Spring	.0110265	.0050768	2.17	0.030	.0010755 .0209774
NSdiv	-.1687289	.0064559	-26.14	0.000	-.181383 -.1560747
HUMdiv	.0245214	.0053772	4.56	0.000	.0139816 .0350611
AAAdiv	.058129	.0112336	5.17	0.000	.0361103 .0801478
BAdiv	-.0691105	.0245398	-2.82	0.005	-.1172104 -.0210106
Jdiv	-.108822	.0164094	-6.63	0.000	-.1409857 -.0766582
MUSdiv	-.1061388	.0155803	-6.81	0.000	-.1366773 -.0756002
online	-.0848056	.0117678	-7.21	0.000	-.1078715 -.0617397
_cons	2.86146	.0063573	450.11	0.000	2.848999 2.873921

In this regression, the dummy variable for the Social Science Division has been left out to prevent multicollinearity. The results show that all of the division dummy variables are statistically significant – i.e. different from SS. This regression also shows that if a student takes a class late, as defined as ending at or after 7:50pm, they can expect an average GPA boost of .07 relative to a class during the hours of 10am-5pm. Enrolling in a 5 credit course will result in students earning a GPA of .14 points higher than their four credit counterpart. In a hypothetical situation, according to these results, a student would experience an elevated GPA of .64 if they took a 5 credit, late, small, upper-division, Spring term, Humanities course relative to the same efforts being given for a regular timed, 4 credit, 200 level, Fall term, Social Sciences course. The opposite extreme would take place under the conditions of an early, large, 4 credit, sub-200 level, Fall term, online, Natural Science course. This combination would result in a decreased GPA of .30 relative to the same statistics held constant previously. Despite being hypothetical at its core, this notion does express a range of .94 GPA points depending on which courses you take and under which conditions you take them.

When actively not accounting for class type, but rather isolating the impact of different course conditions, the following regression is created:

Table 6: Average GPA Regression on Course Conditions

```
. reg avgGPA late early YEAR large small threecr fivecr C100 Cupper Winter Spring online
```

Source	SS	df	MS	Number of obs	=	20,523
				F(12, 20510)	=	780.76
Model	863.749918	12	71.9791598	Prob > F	=	0.0000
Residual	1890.82835	20,510	.092190558	R-squared	=	0.3136
				Adj R-squared	=	0.3132
Total	2754.57826	20,522	.134225624	Root MSE	=	.30363

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
late	.0719915	.0238631	3.02	0.003	.025218	.1187651
early	-.0175523	.0057471	-3.05	0.002	-.0288171	-.0062874
YEAR	.0006271	.0003916	1.60	0.109	-.0001405	.0013946
large	-.1214156	.0085542	-14.19	0.000	-.1381826	-.1046487
small	.3541432	.0047913	73.91	0.000	.3447518	.3635346
threecr	-.0761325	.020217	-3.77	0.000	-.1157595	-.0365056
fivecr	.1656656	.0108663	15.25	0.000	.1443669	.1869643
C100	-.0006797	.0061501	-0.11	0.912	-.0127344	.011375
Cupper	.100547	.0048398	20.78	0.000	.0910606	.1100334
Winter	.0039833	.0051227	0.78	0.437	-.0060575	.0140242
Spring	.0067353	.0052115	1.29	0.196	-.0034797	.0169503
online	-.0429154	.0114268	-3.76	0.000	-.0653128	-.0205179
_cons	2.811676	.0056777	495.21	0.000	2.800547	2.822805

In context of the small variable, if a class is considered to be small (less than 50 students), the average GPA awarded will be .35 points higher than if the class size was between 50 and 200. This rather surprising result could be used to shed light on the importance of small class sizes among academic institutions and academic success.

The extensive results for General Education requirements can be observed in their entirety within the appendix. However, a summary of the results would include that near identical trends were found between the General Education requirement courses and the regular major track classes. It was important to note that despite nominal differences, the average GPA of General Education courses was on average .04 points lower than that of the total average GPA at the University of Oregon.

The third and final regression tested in this thesis quantifies the impact that different variables had on withdrawals from classes. Below is the regression that was run and the corresponding results:

course, then there is an increase in student withdrawals of .23 units in comparison to entry level courses.

However, the key to understanding the impact of these variables on the withdrawal rate is the variable Max. The variable Max is significant at the .05 level with a p-value of .000 and a coefficient of .033. Therefore, a one unit increase in Max will cause the number of students to withdrawal to increase by .033. When interpreting the value relative to class sizes of 300 or more, this number has a very large impact. Please see the Appendix for the tables regarding the regression accounting for particular classes as opposed to divisions.

CONCLUSION

Overall, courses average GPA has been rising at the University of Oregon between 1996 and 2014. But grade inflation has been anything but uniform. The College of Arts & Sciences- Natural Sciences and the College of Education have seen their average grades stay relatively unchanged while the College of Arts & Sciences- Social Sciences and Humanities have seen both their average GPAs rise significantly. The College of Architecture & Allied Arts has seen a significant drop in its GPA. Despite the clear differences among grade changes in academic divisions, the overall trends that each individually have been taking are relatively linear without major outliers.

As grades have been increasing at the University and primarily the Social Sciences and Humanities divisions, grade concentration has also become a more relevant topic of discussion. Between the years of 2001 and 2010, CAS- Humanities awarded over 40% of their grades as As and 3% as Ds or Fs. The College of Business shows the starkest contrast with As awarded averaging about 25% and Ds and Fs at about 14% during these timespans. The disparity between grading styles is stark.

On a more micro-level, average grades, too, are becoming more uniformed. Language courses including Korean, Japanese, Spanish, French and Swedish almost always have average course GPAs above a 3.30. Courses like Art History, Jazz Studies, Biology, Business, and Economics, rarely if ever, have average GPAs over a 2.80. These letter grades are almost a full letter grade apart. Regardless of academic merit supporting each average GPA, the fact that average GPAs are this significantly different inherently questions the significance of an average GPA.

In conclusion, overall average grades are increasing at the University of Oregon despite some academic divisions awarding fewer As every year. Withdrawal rates from classes are directly and inversely impacted by these average GPAs. Overall, despite being significant, average GPA seems to have a relatively nominal impact in comparison to the impact of max enrollments per class.

An increase in possible course enrollment by 1 student will cause an increase in withdrawals of .033. Initially this too seems nominal, however at the University of Oregon, some lecture classes have over 500 students thus creating a situation where substantially more students (17 in this case) will withdraw solely based on the class size. Overall, compared to course size, average GPA plays a small but significant role in course withdrawals.

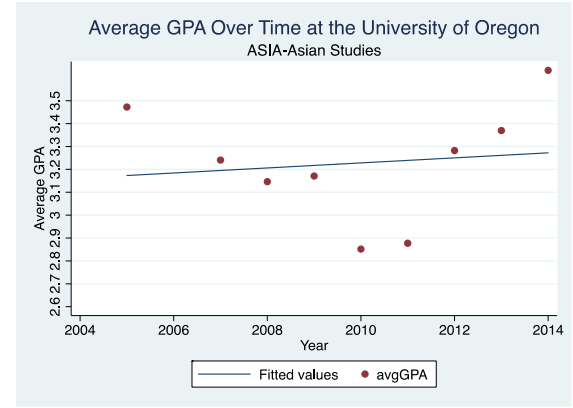
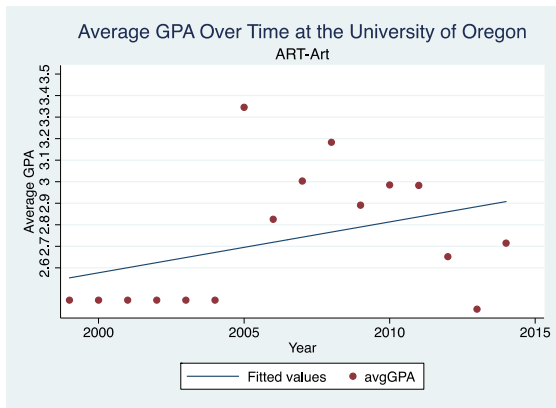
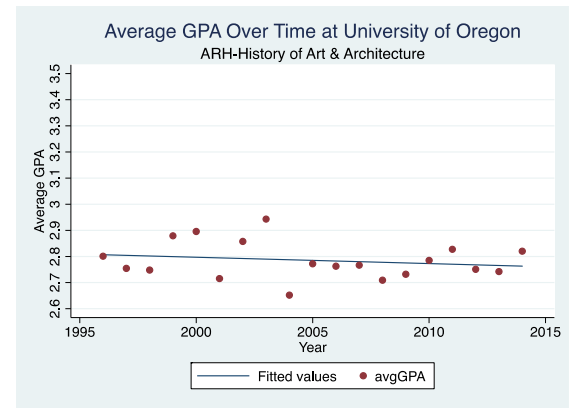
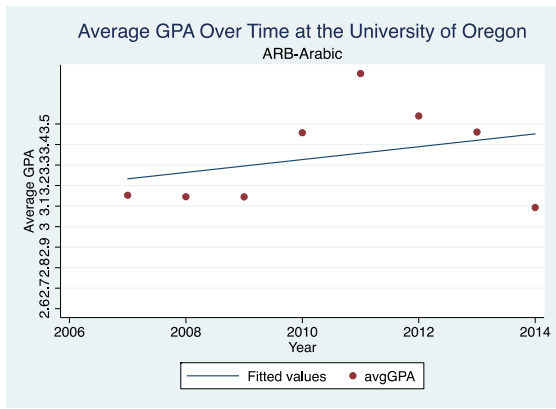
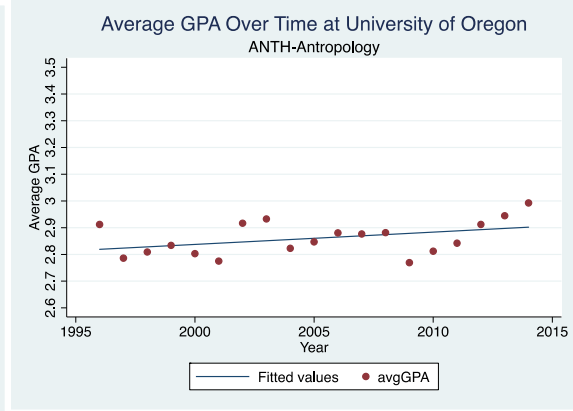
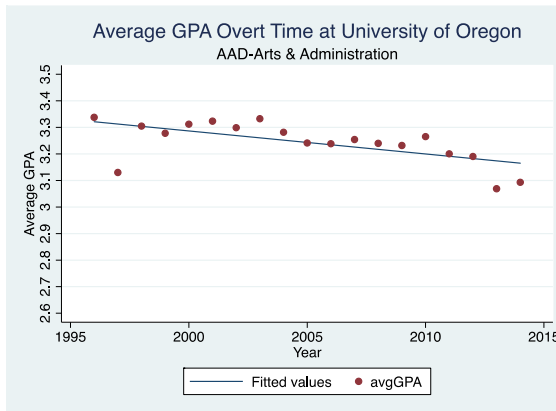
This report helps elucidate the argument that different academic fields report GPAs at significantly different rates and have also been experiencing different trends present at the University of Oregon over the last 20 years. It is important to try and figure out why these trends are occurring; specifically, what is causing certain departments to have significantly higher grade averages? These differences could be based on different teaching styles, or different curriculum ideologies such as a competence verse evaluative-based courses. This could also be due to a courses particular grade breakdown. Test scores heavily influence certain courses while other courses are essay based.

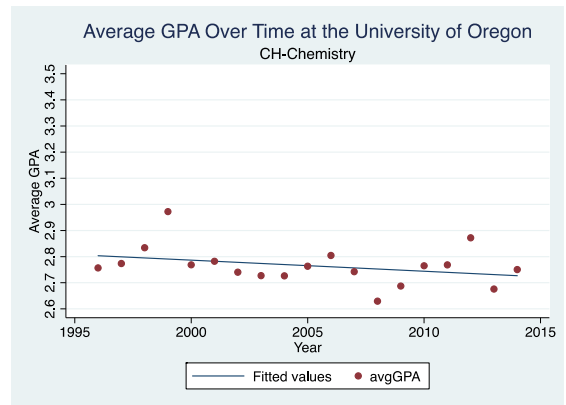
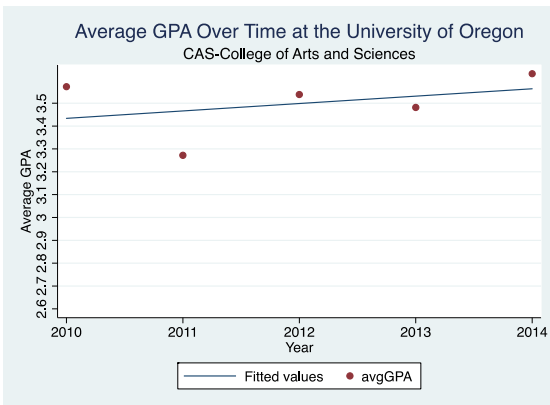
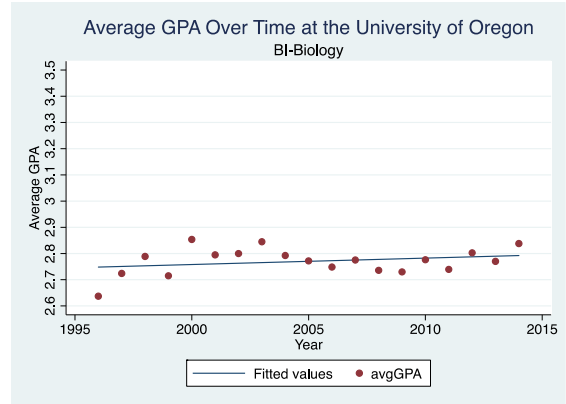
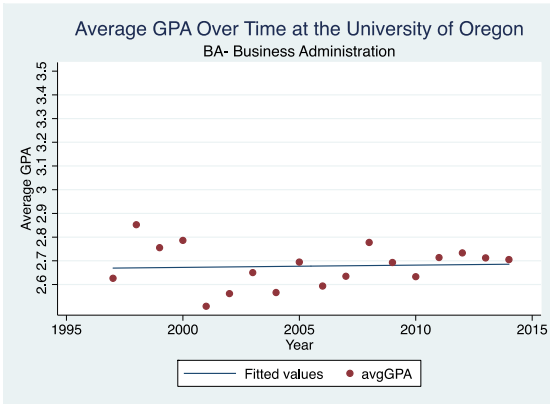
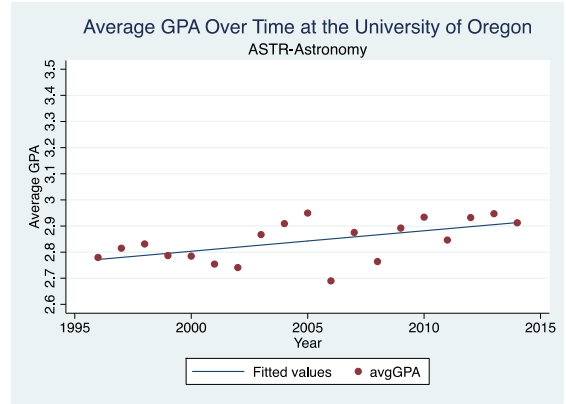
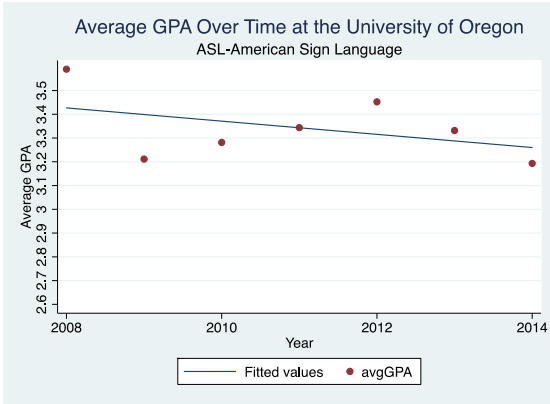
Grade inflation is occurring at the University of Oregon but the purpose and mission for raising grades is currently unclear. Do new academic programs have higher average GPAs as a means to intrigue new students? How have these grade discrepancies

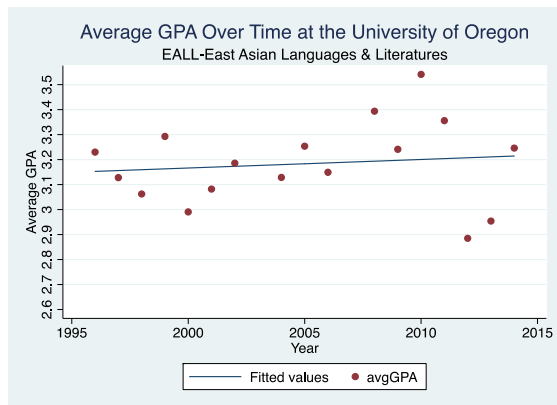
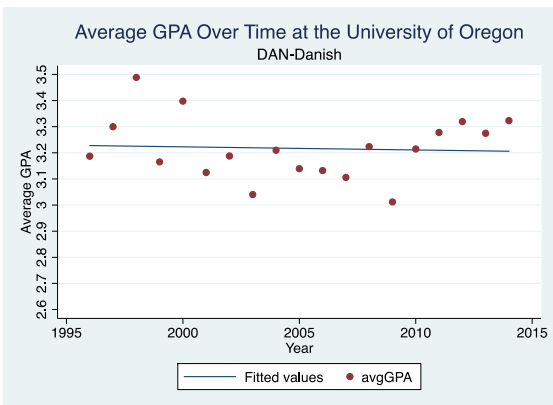
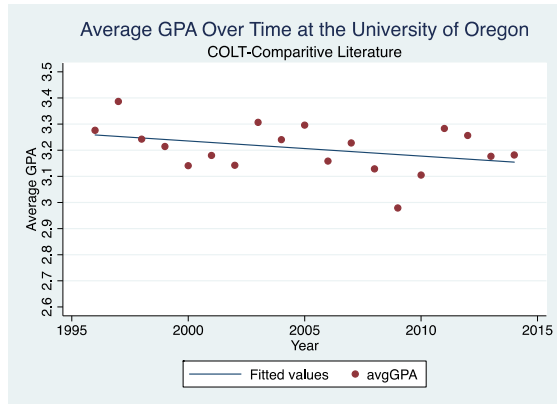
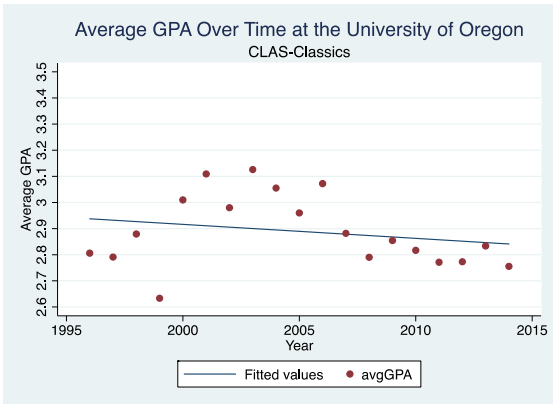
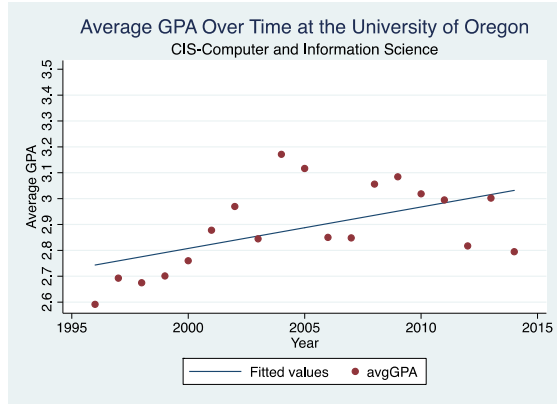
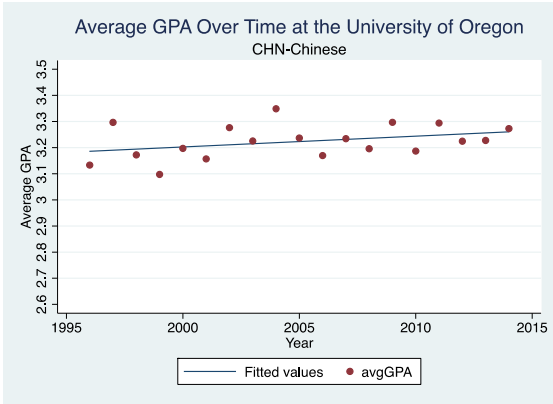
impacted previous courses enrollment? Are enrollment rates impacted by previous years average GPA? How prevalent and significant are trends of grade inflation on decisions to enroll in different academic courses?

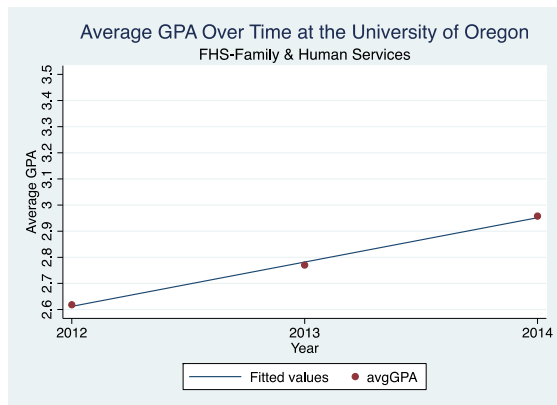
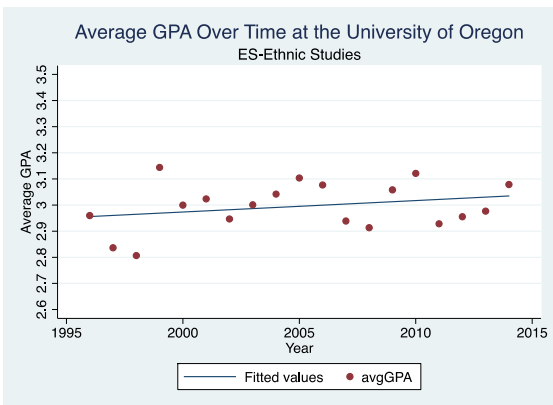
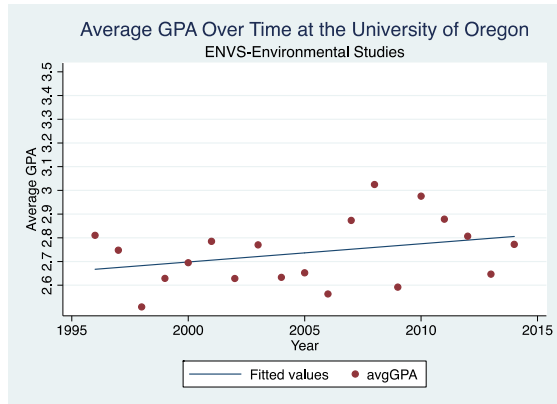
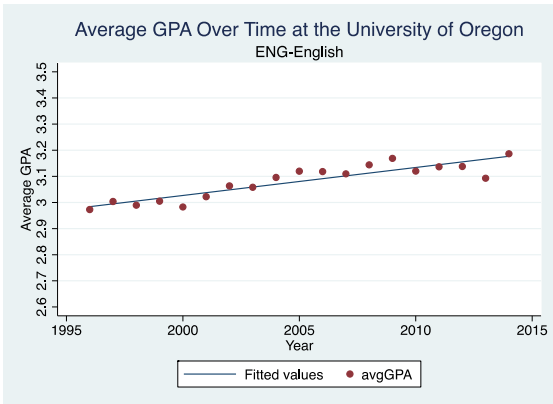
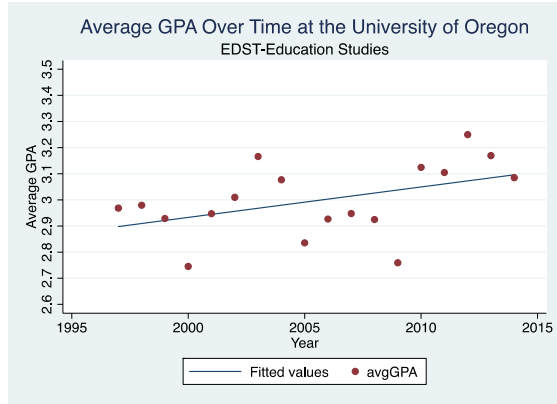
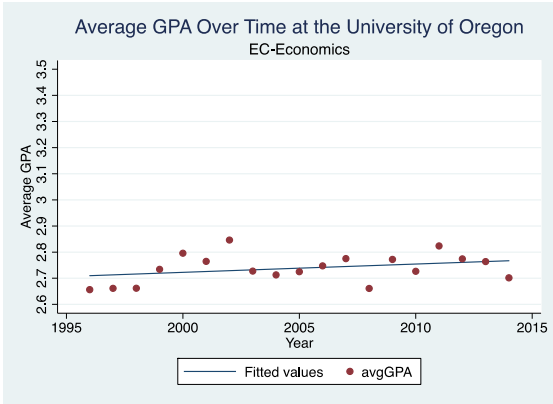
With the information provided in this report, it is important to work towards better understanding the academic environment present at the University of Oregon. Ideally, this new information can be used to increase dialogue between departments on how they feel students should be held accountable for mastering the material. This information will be used to provide a means to rectify misunderstandings regarding academic success rooted in the substantial differences in average grades and one day, hopefully, be a part of a new academic grading regime truly capturing the essence of a grade.

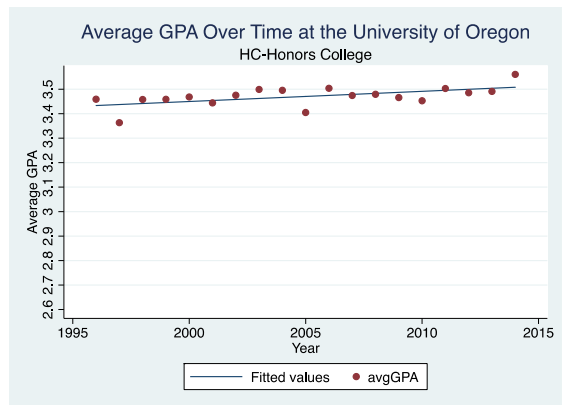
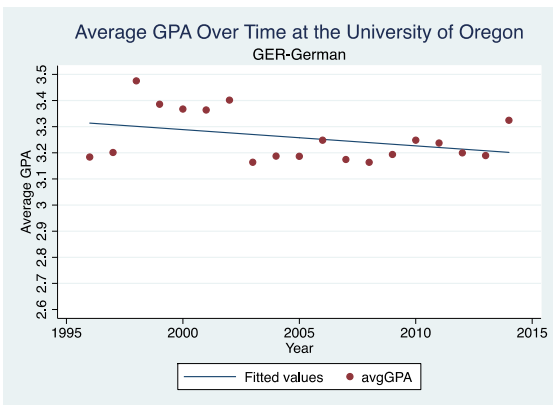
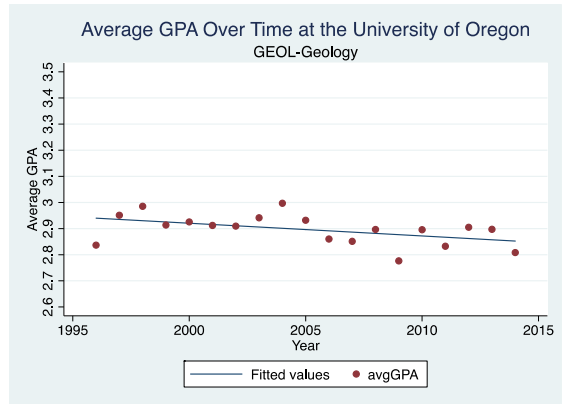
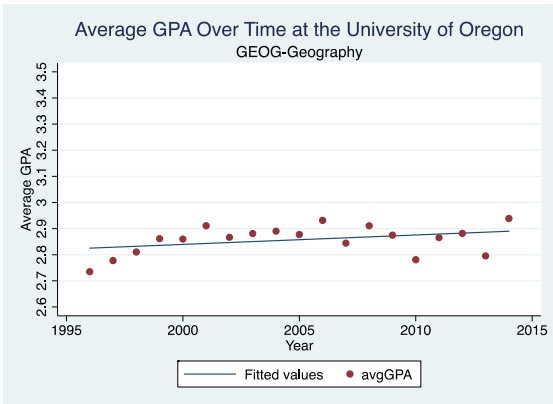
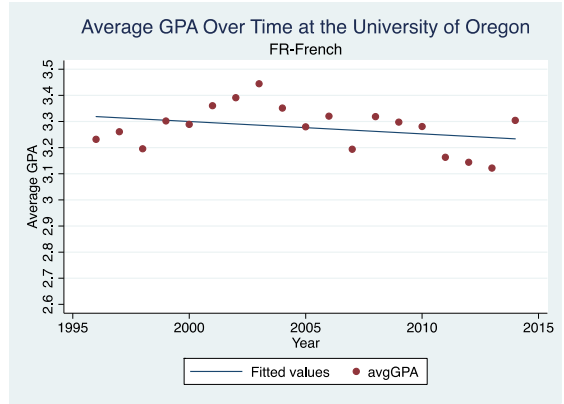
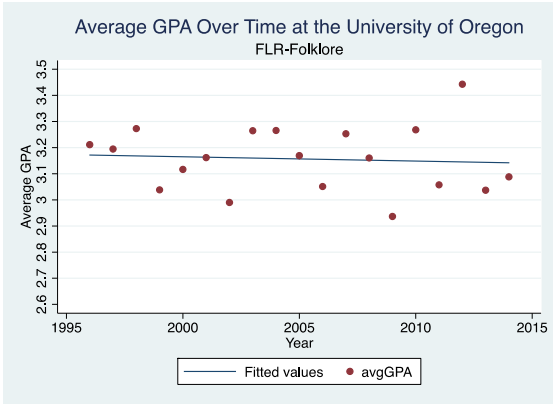
APPENDIX
SCATTERPLOT WITH LINEAR TREND APPROXIMATION

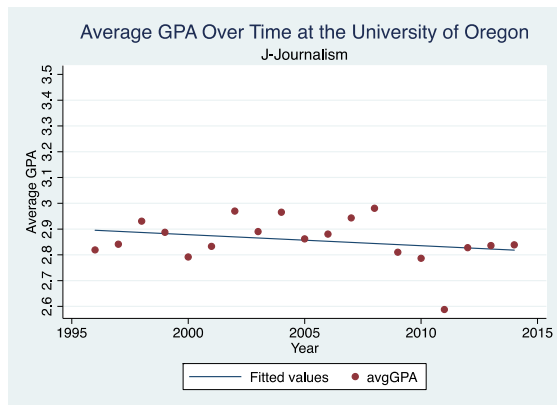
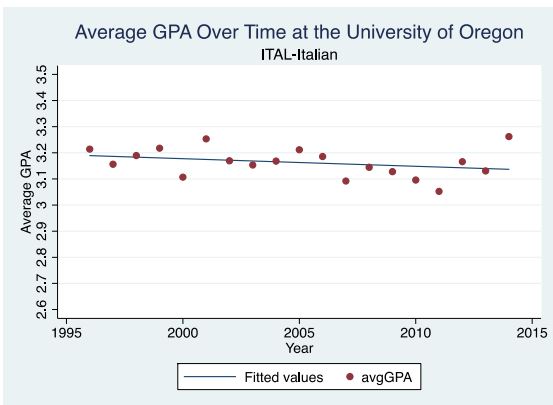
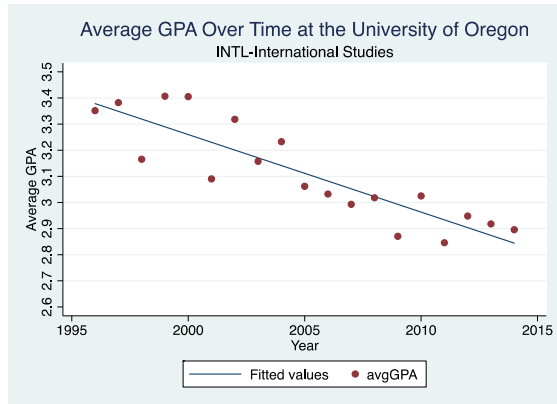
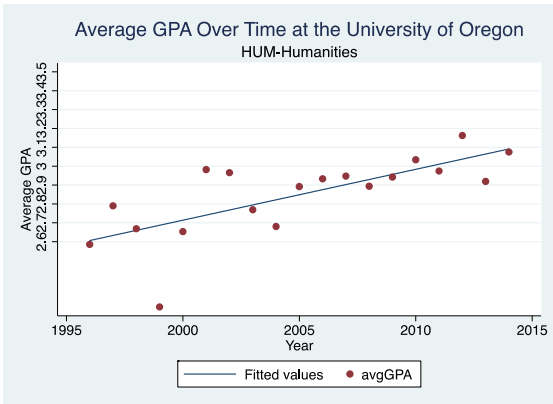
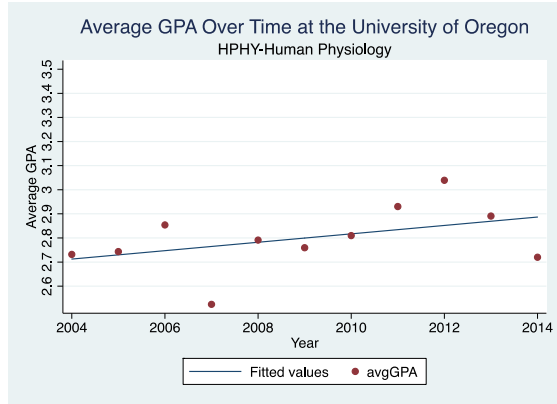
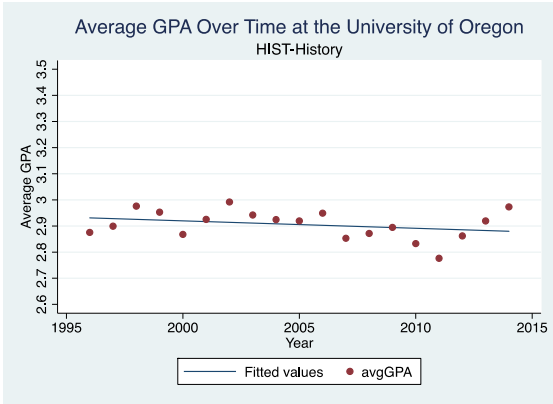


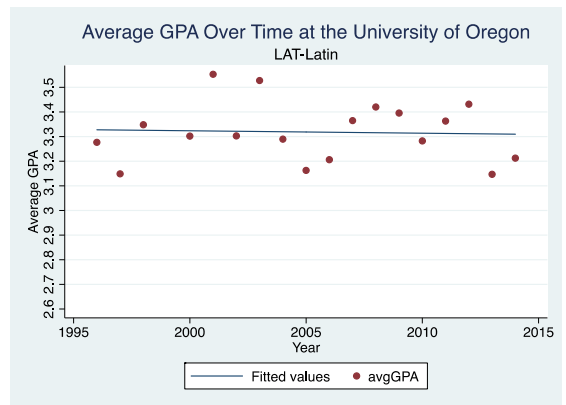
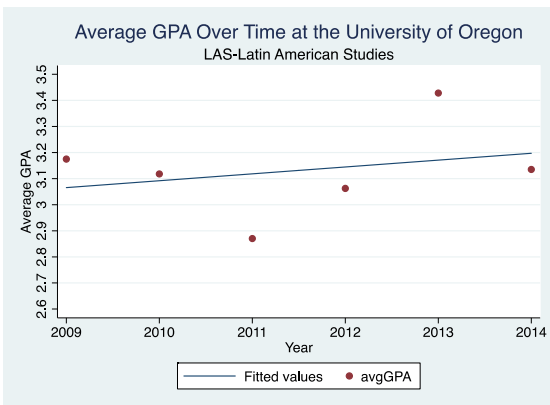
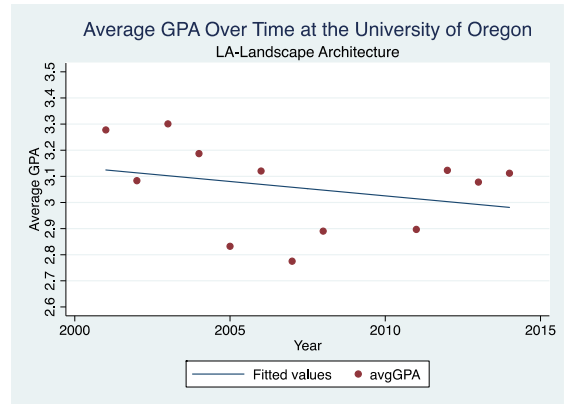
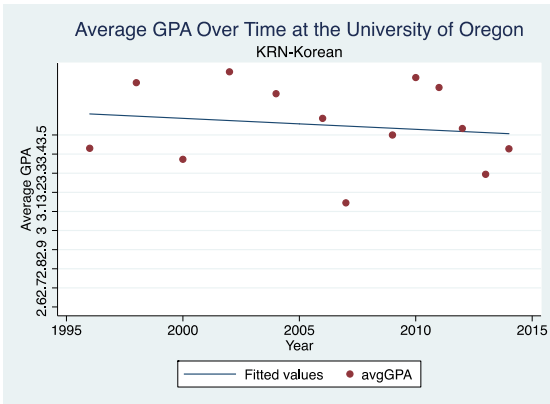
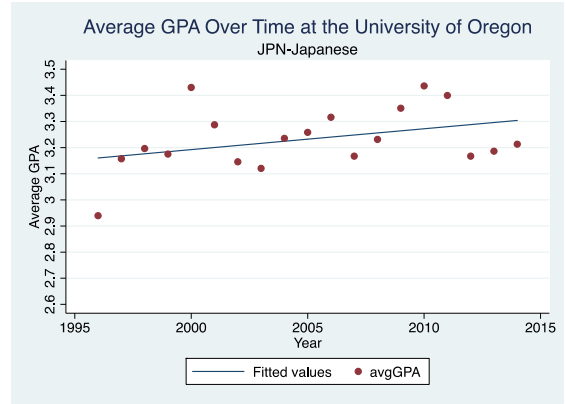
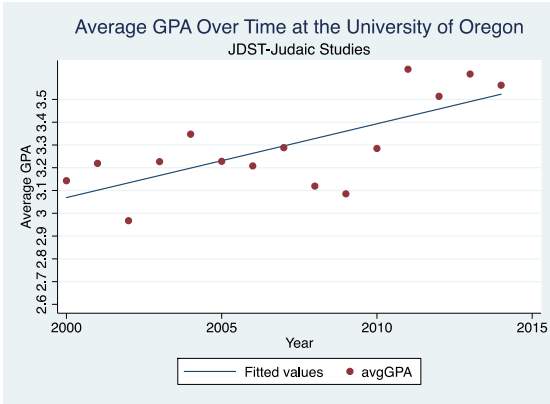


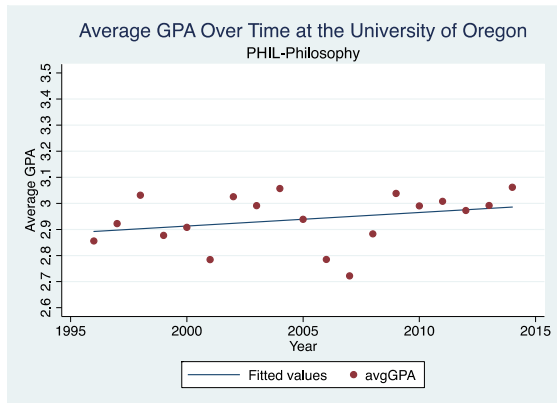
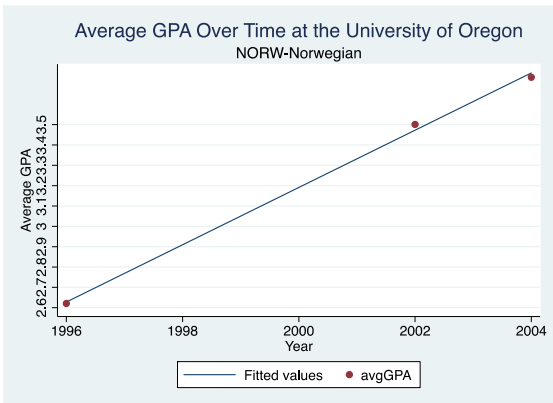
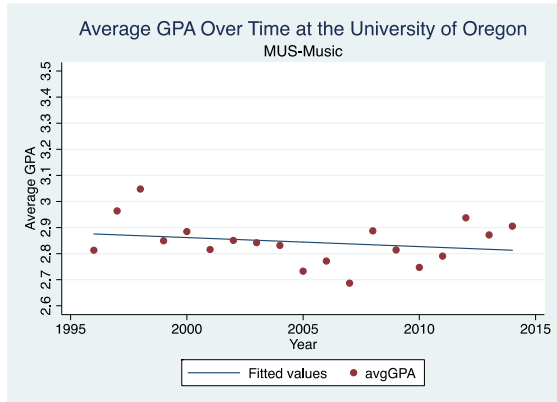
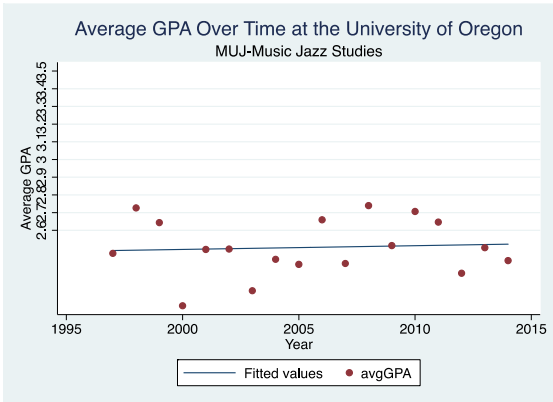
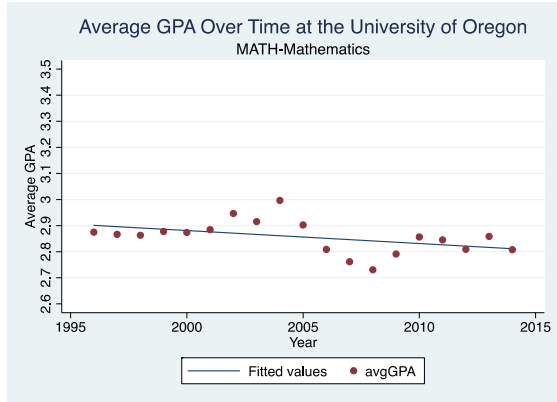
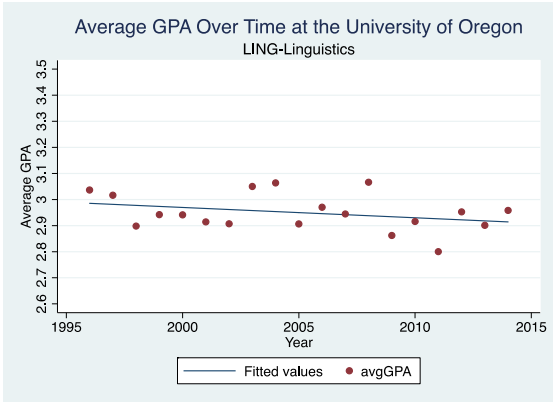


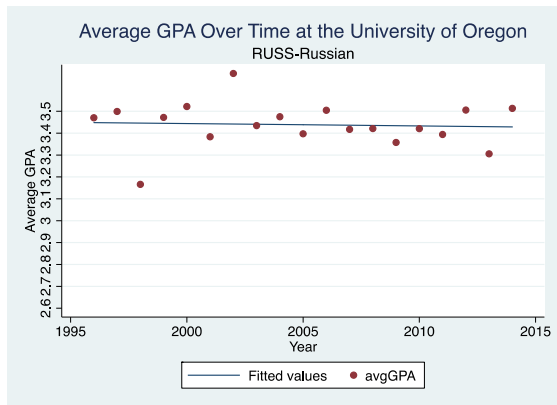
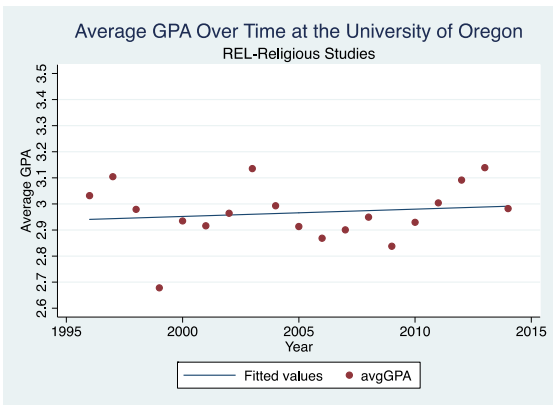
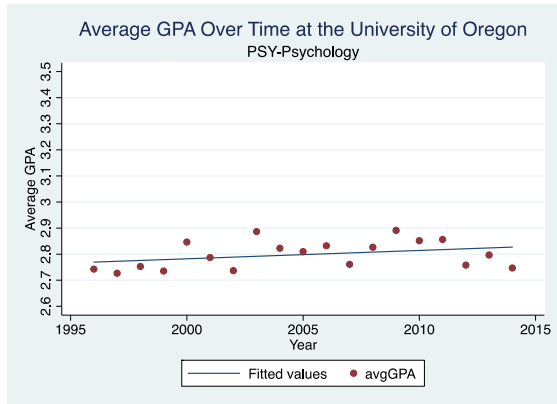
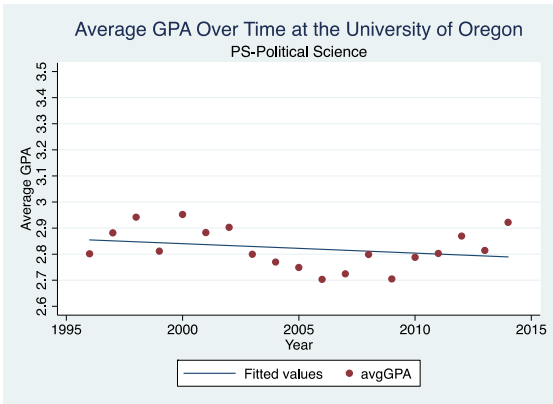
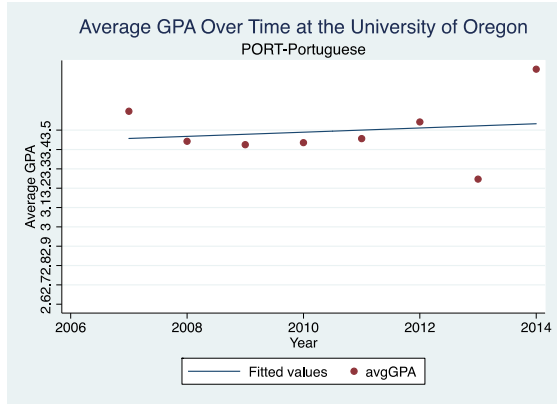
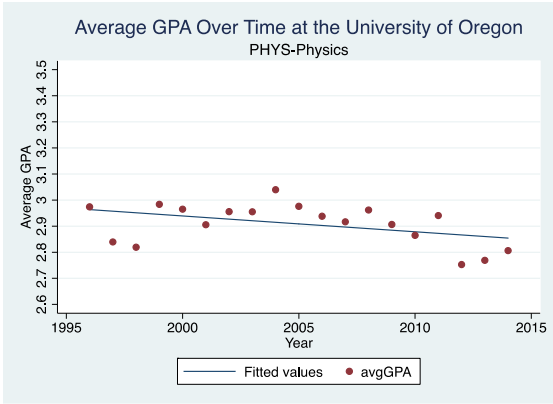


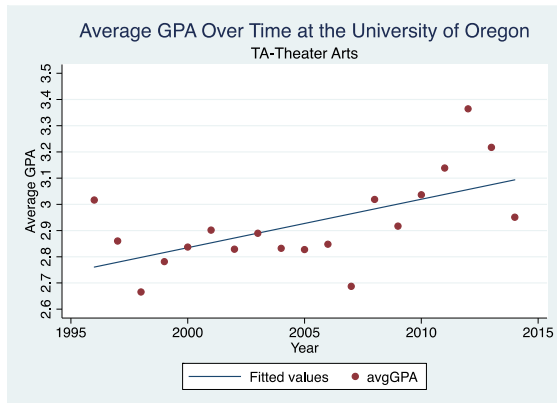
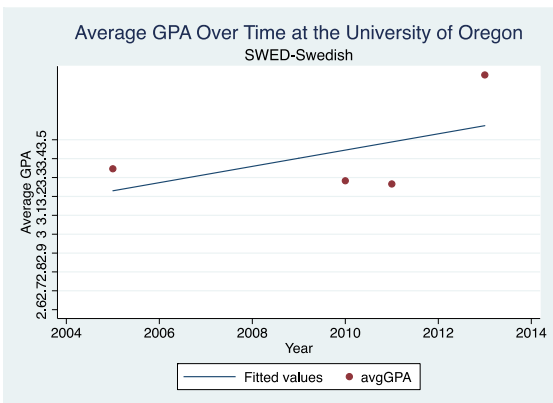
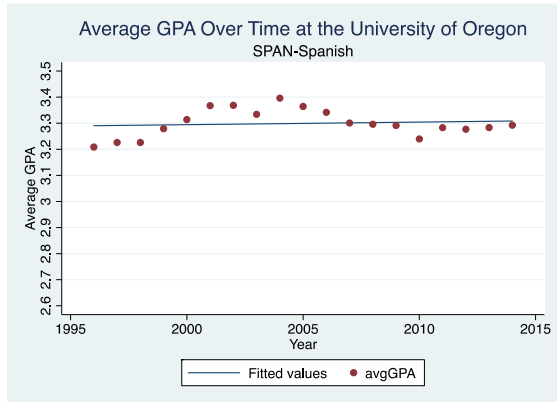
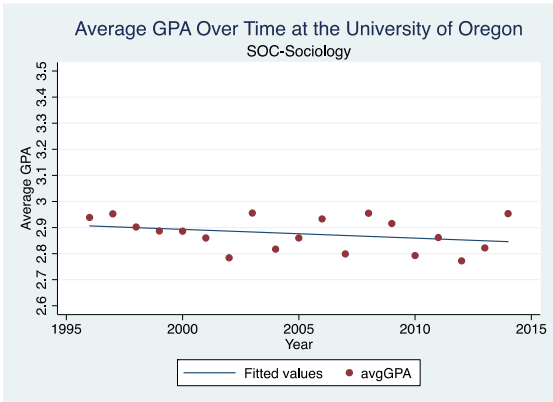
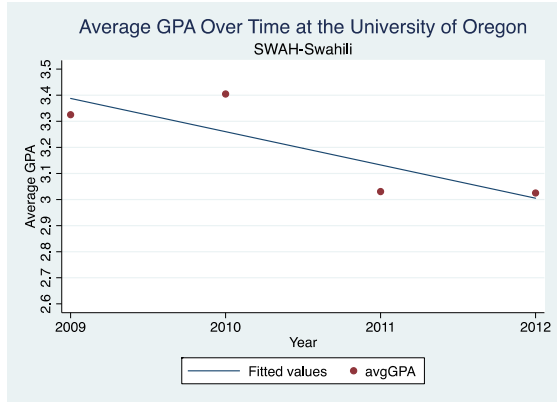
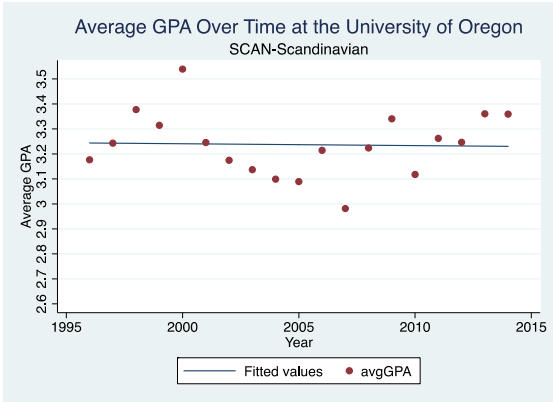


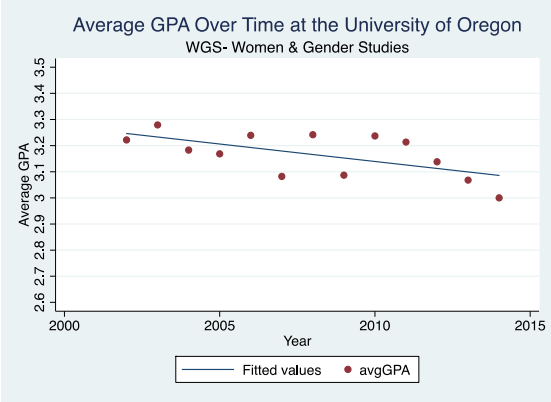




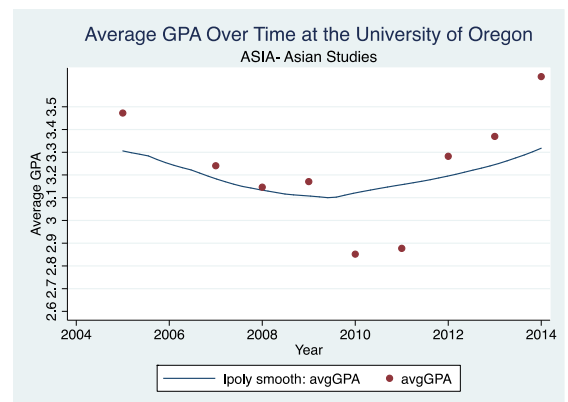
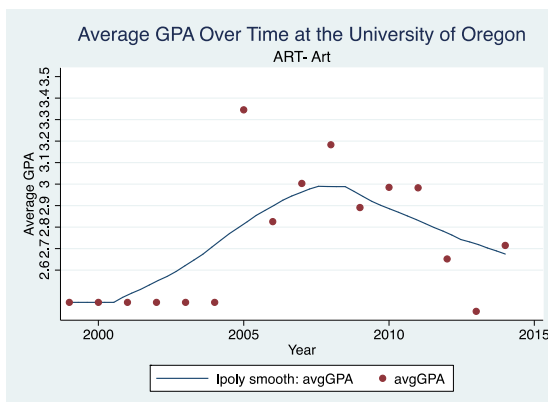
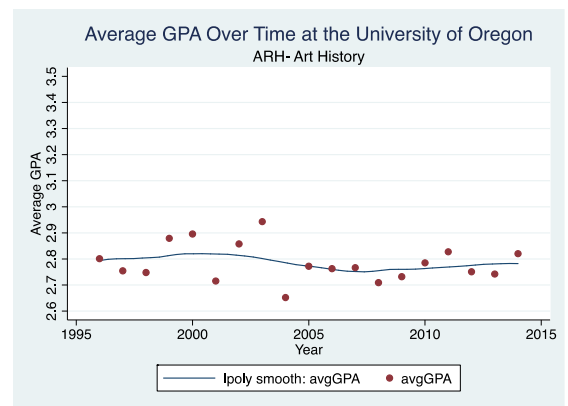
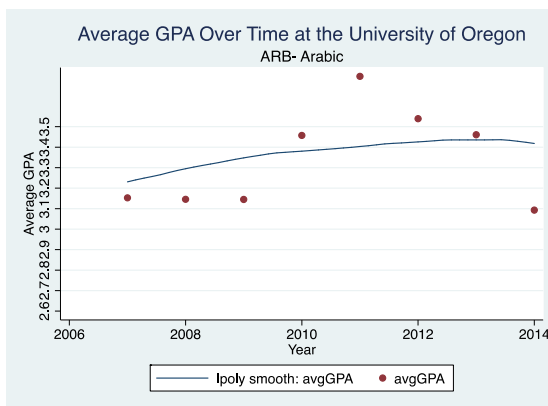
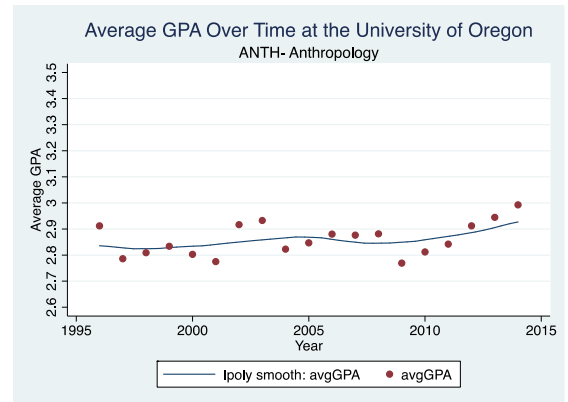
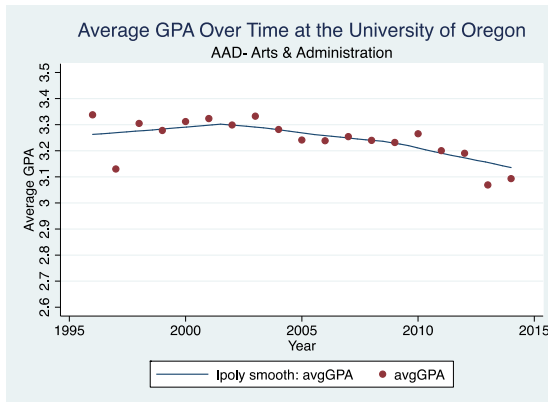


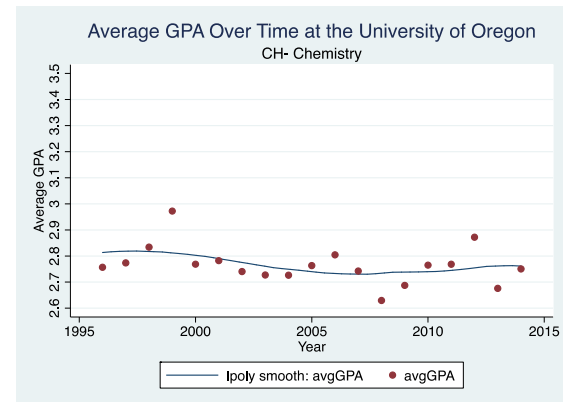
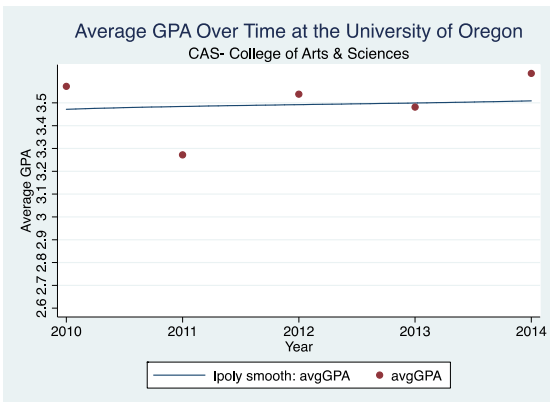
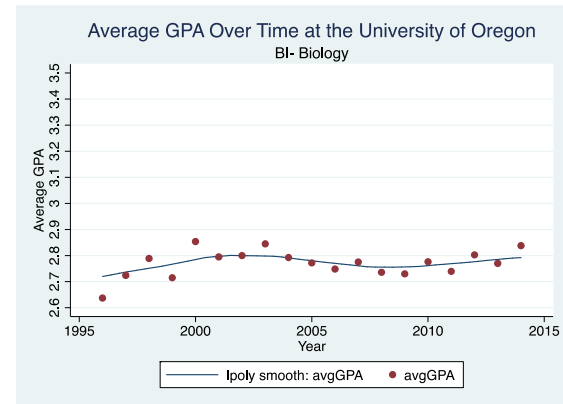
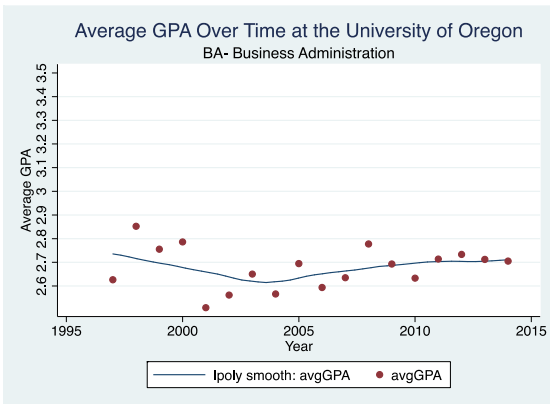
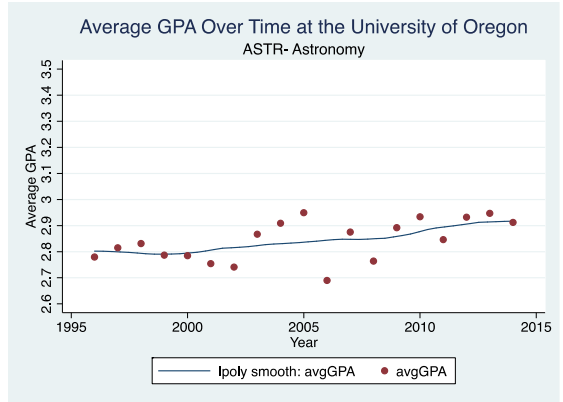
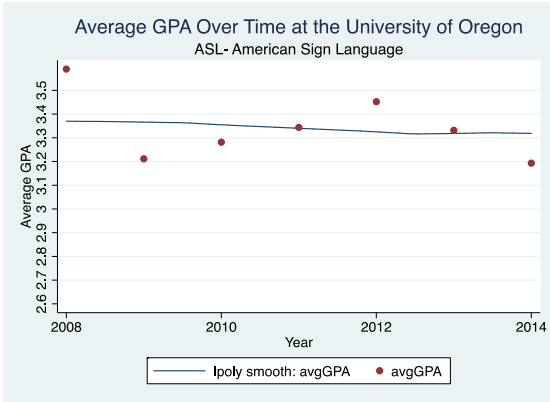


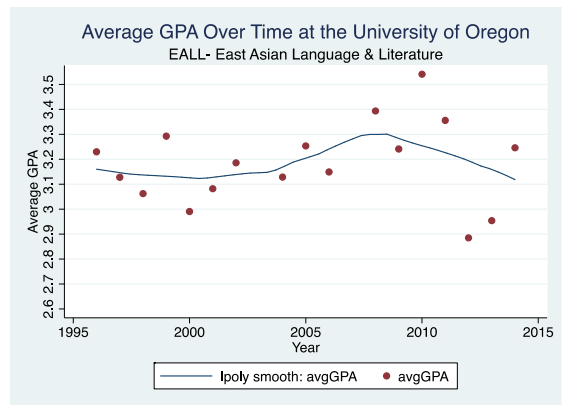
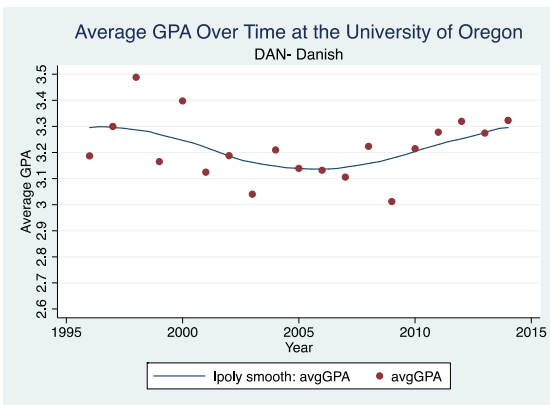
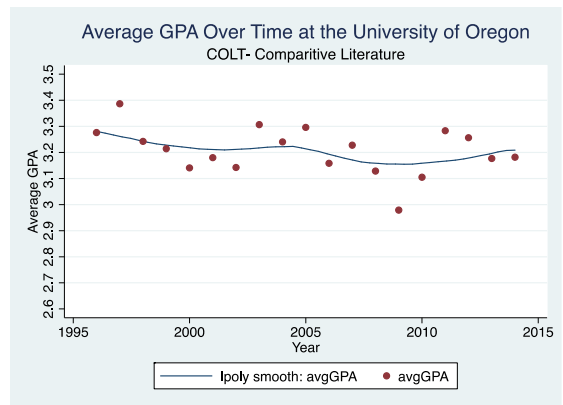
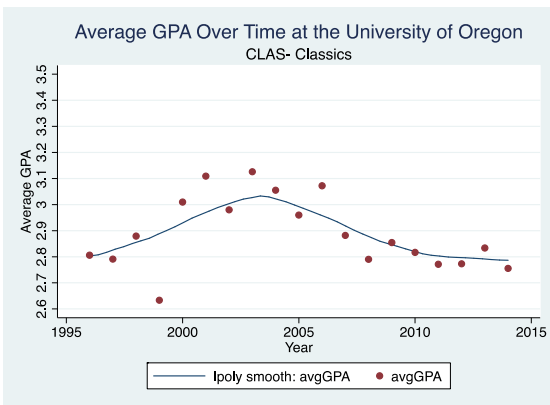
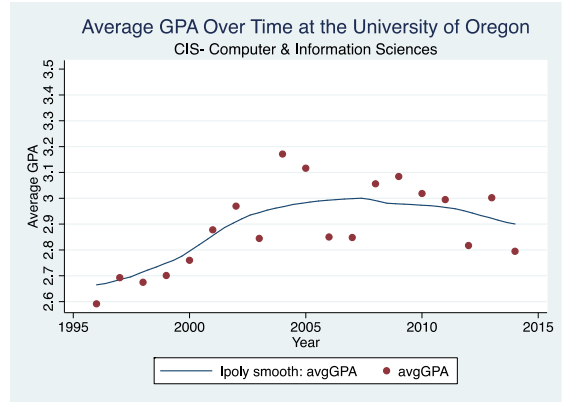
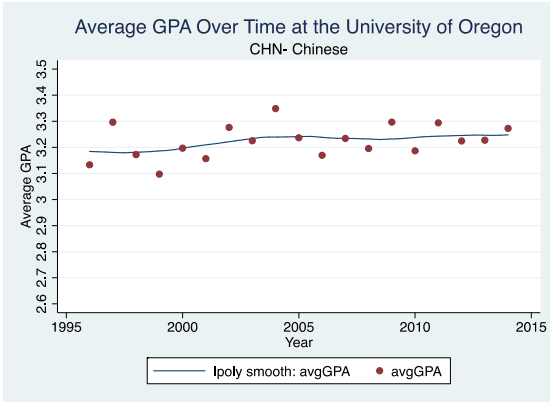


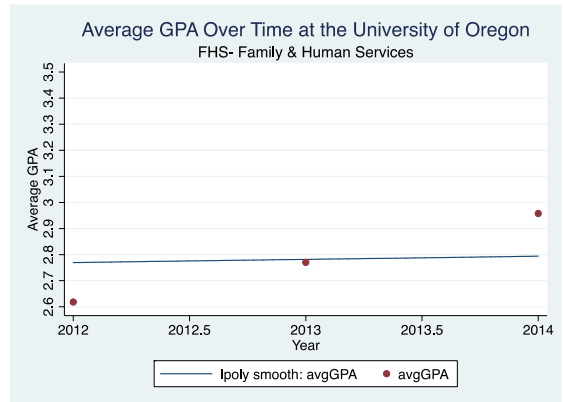
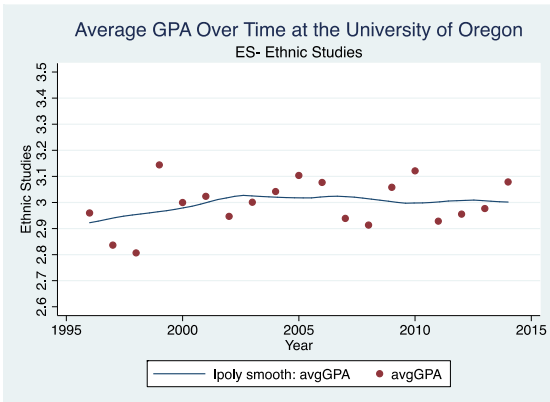
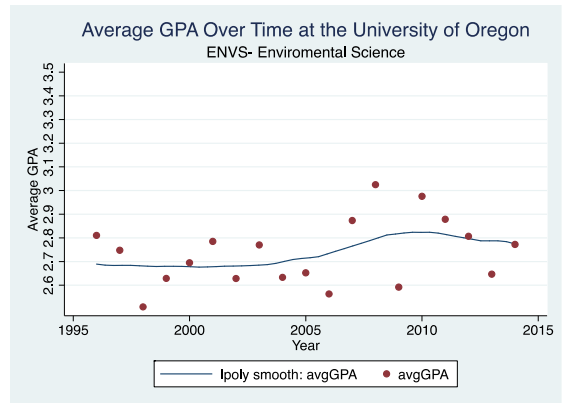
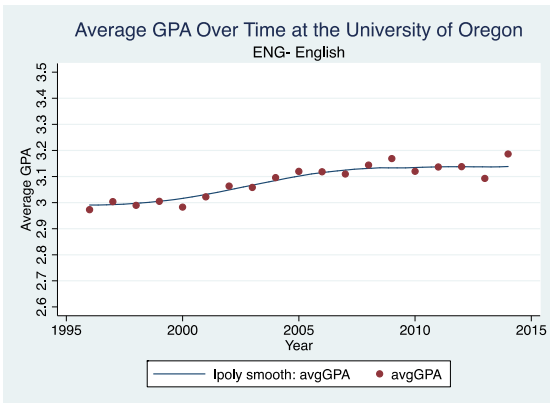
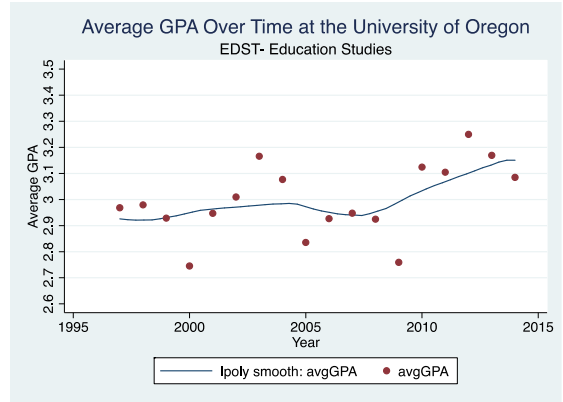
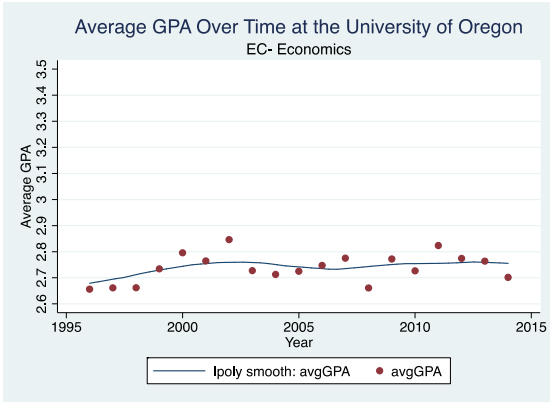


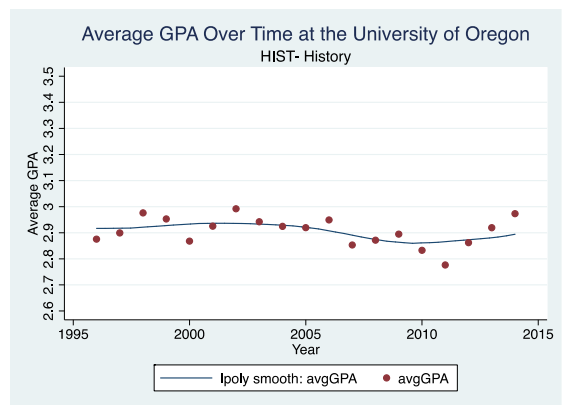
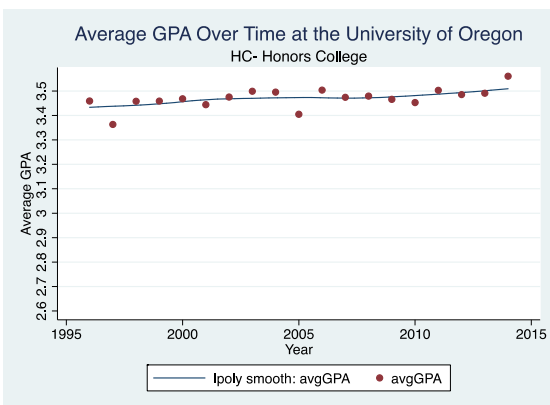
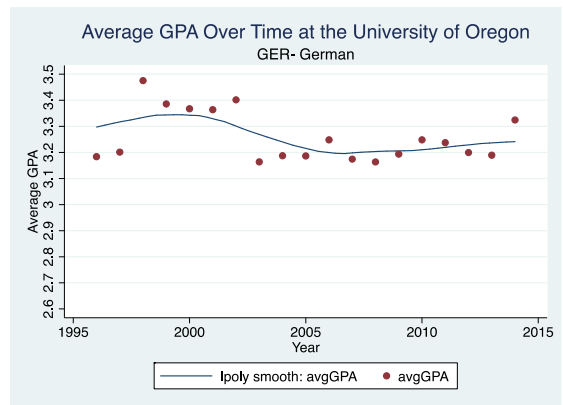
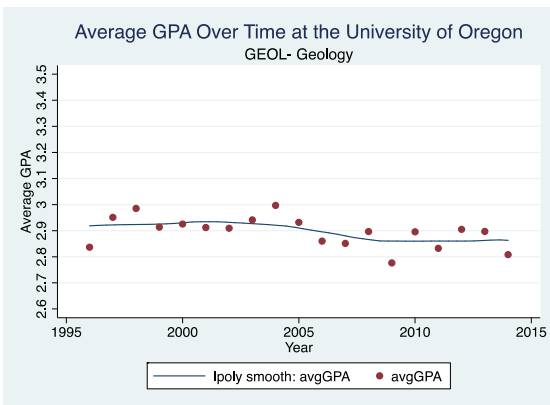
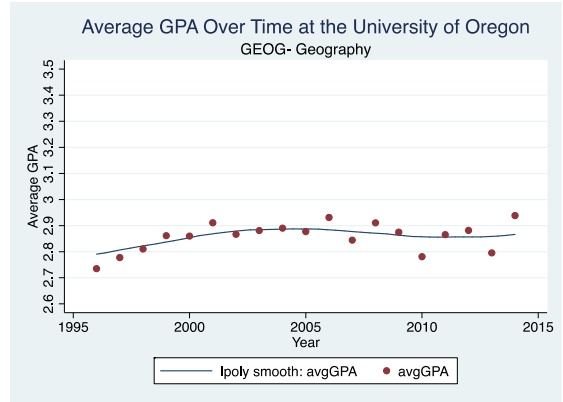
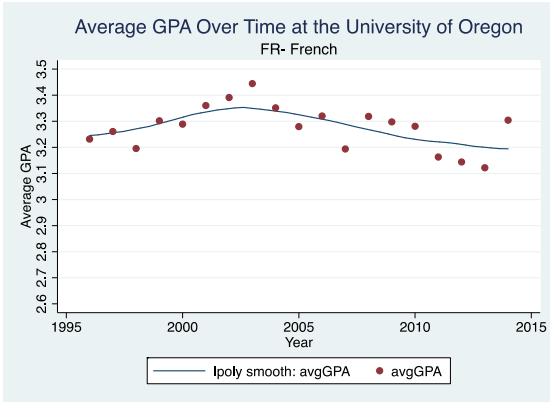
SCATTERPLOT WITH KERNEL-WEIGHTED LOCAL POLYNOMIAL REGRESSION

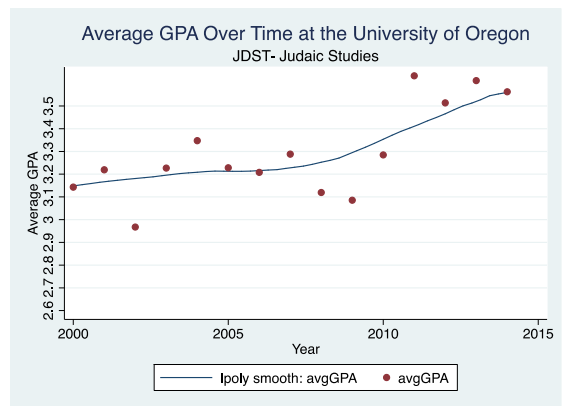
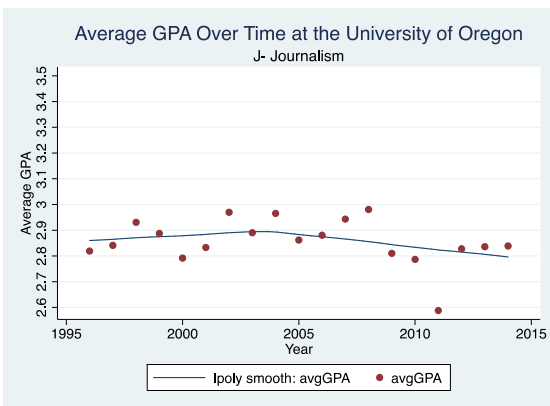
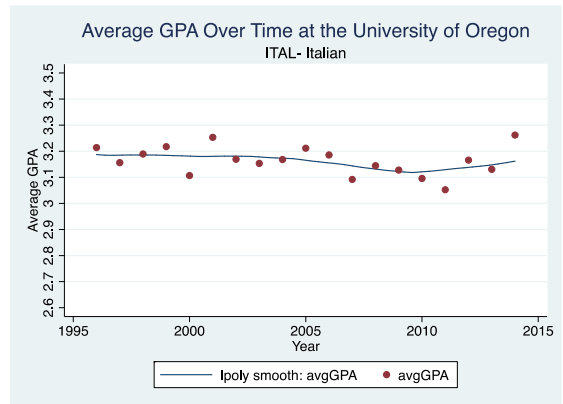
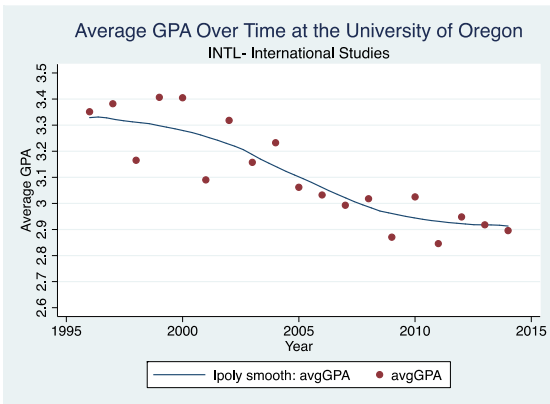
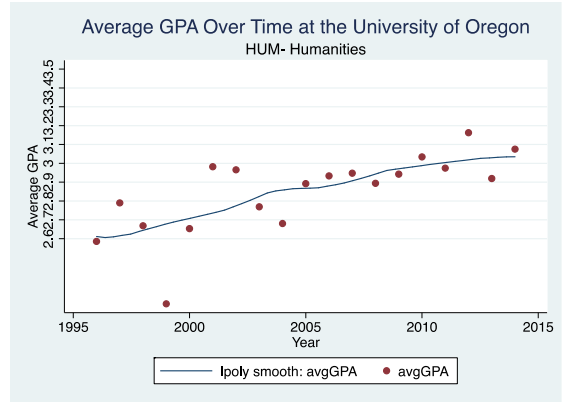
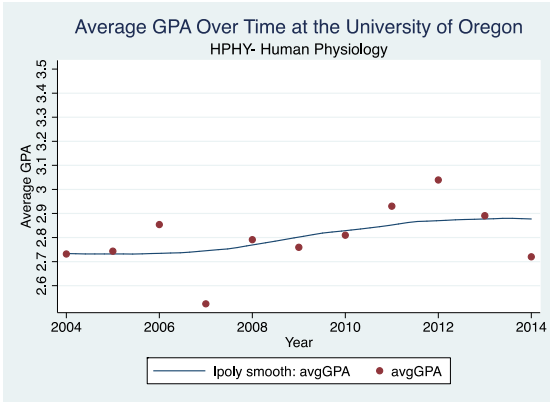


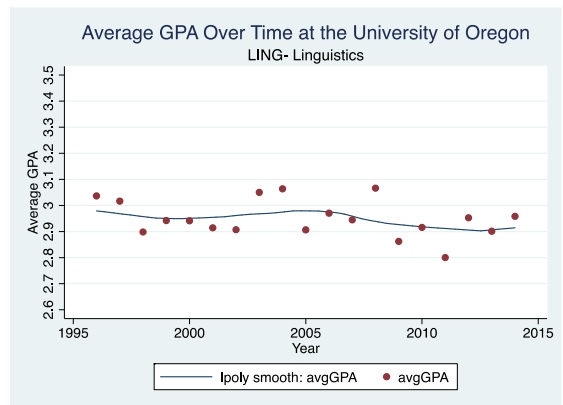
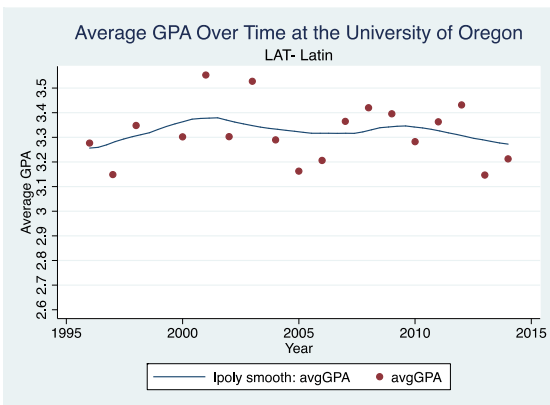
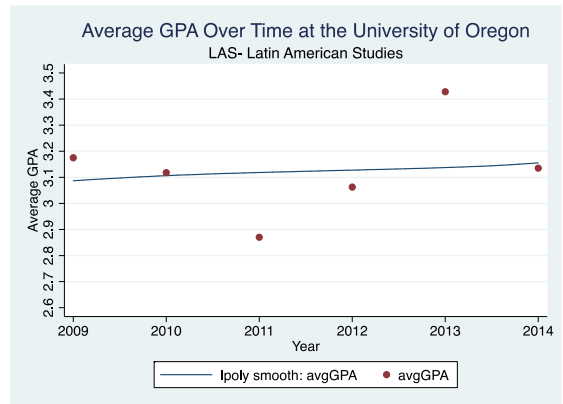
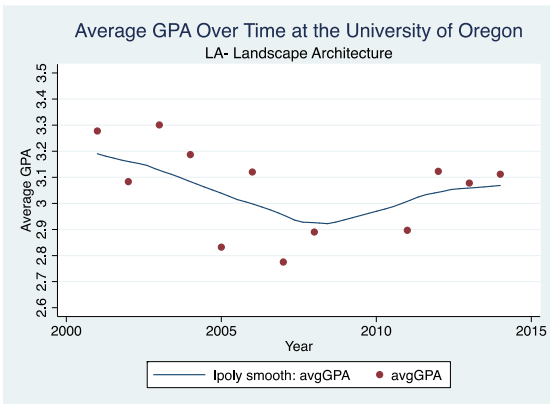
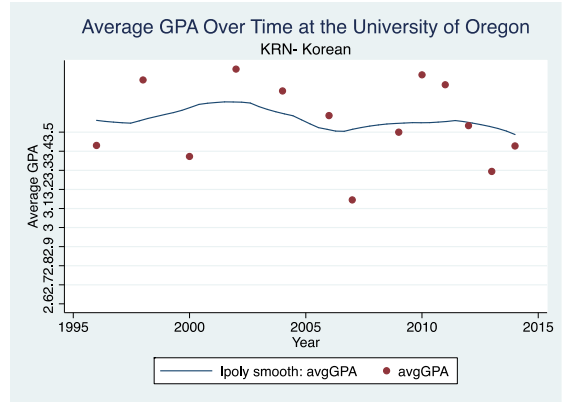
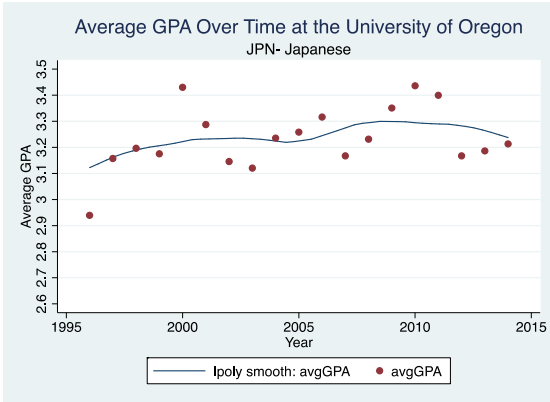


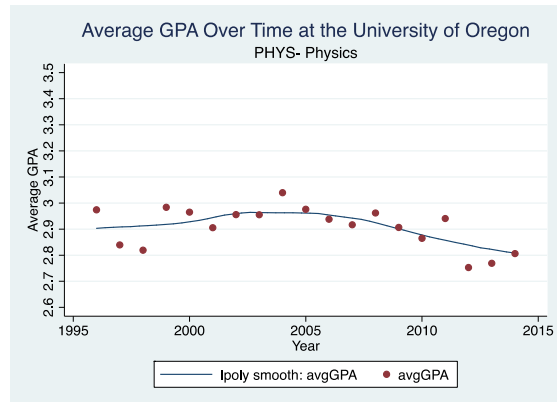
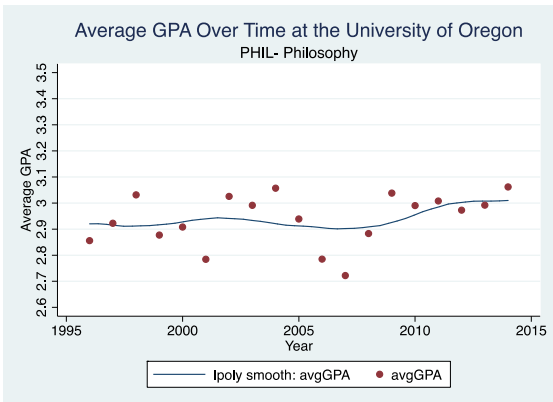
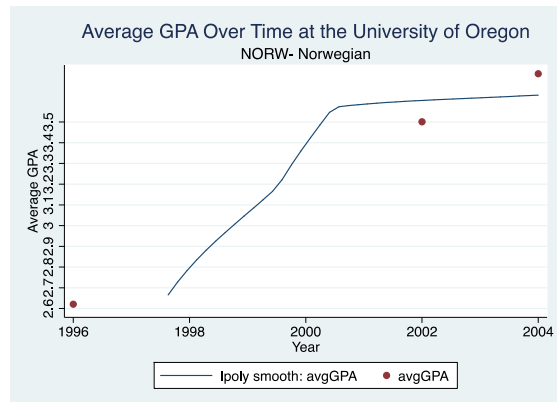
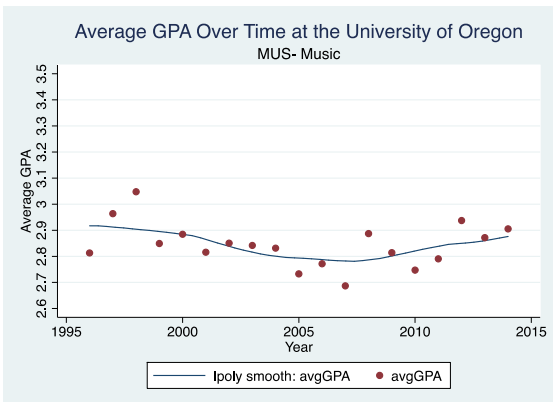
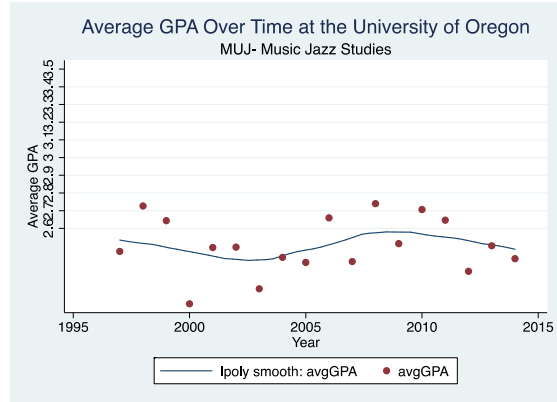
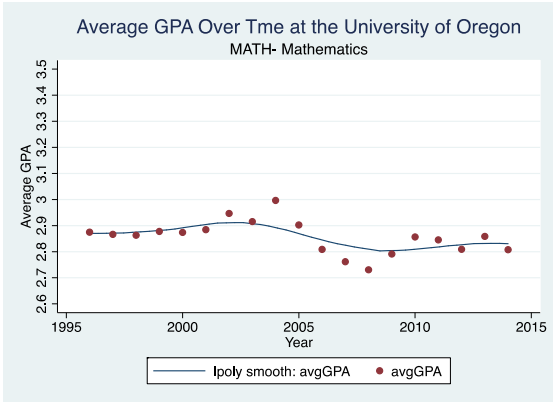


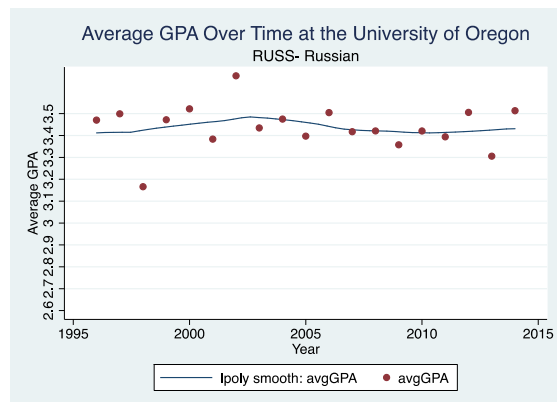
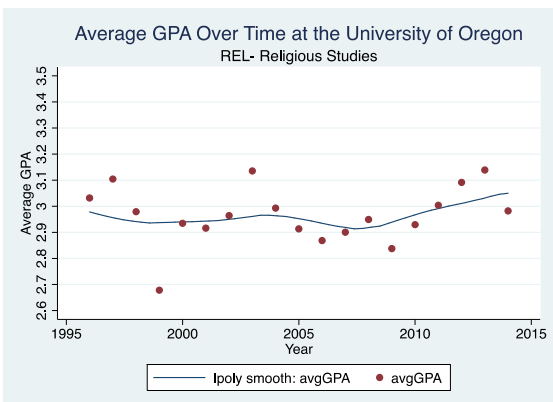
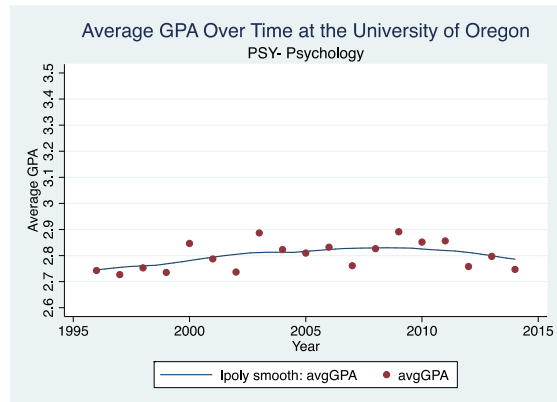
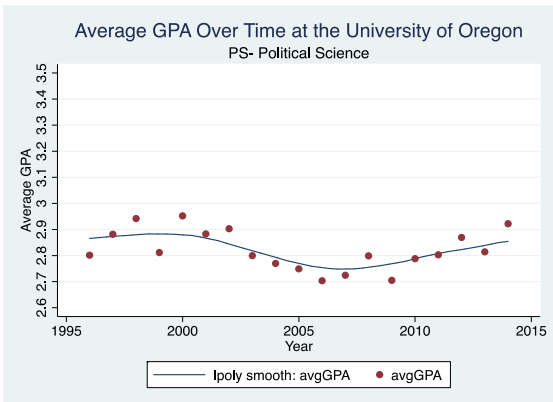
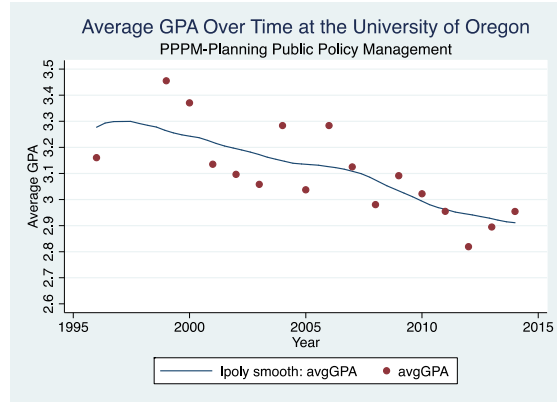
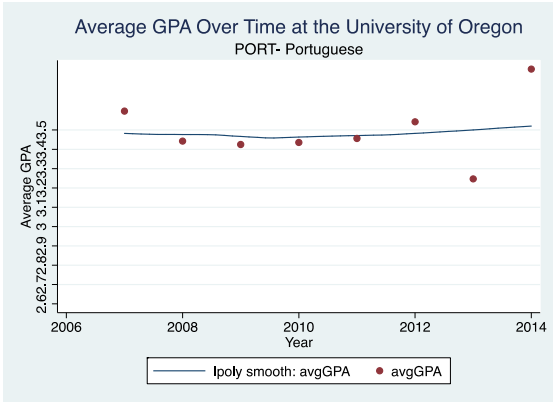


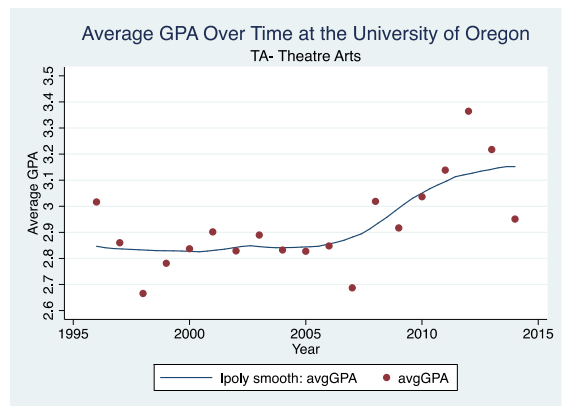
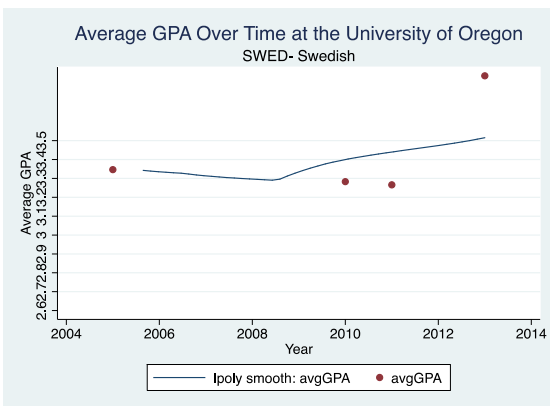
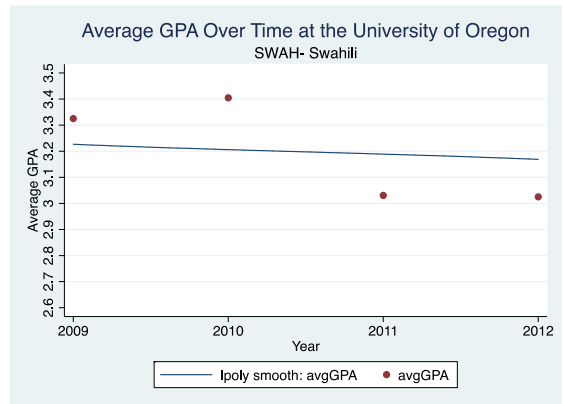
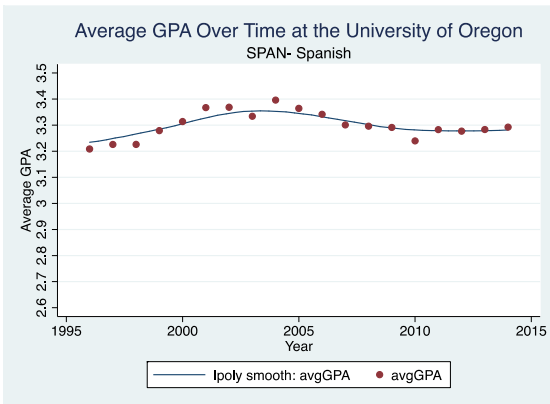
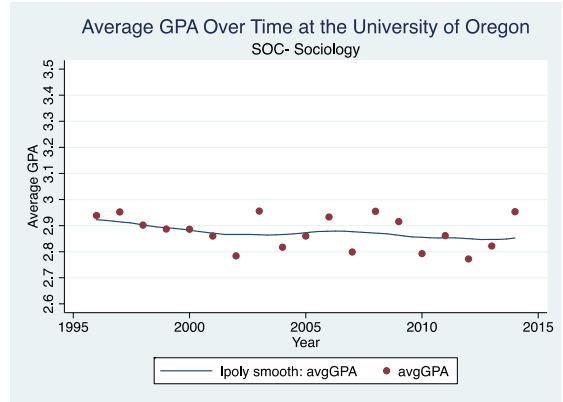
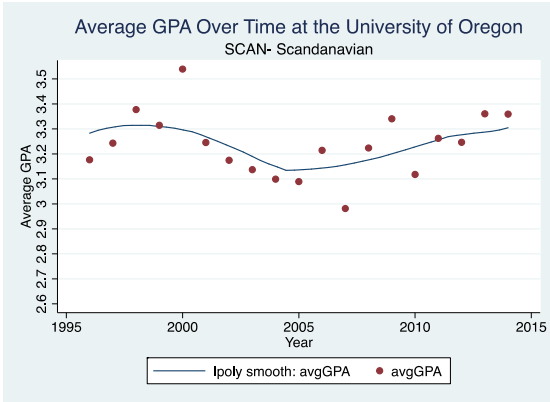


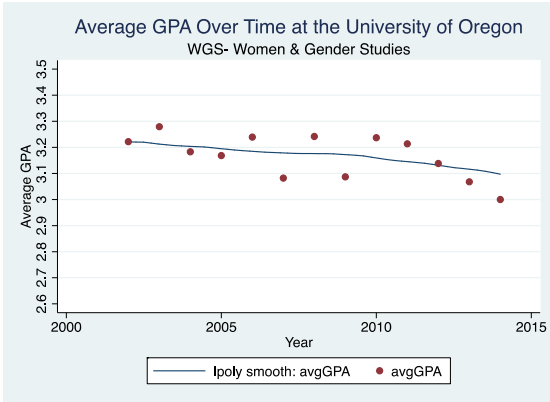




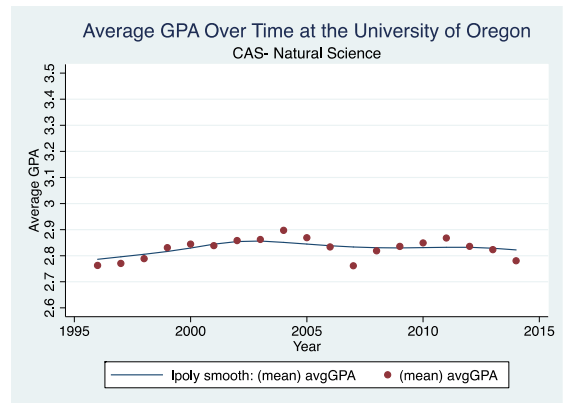
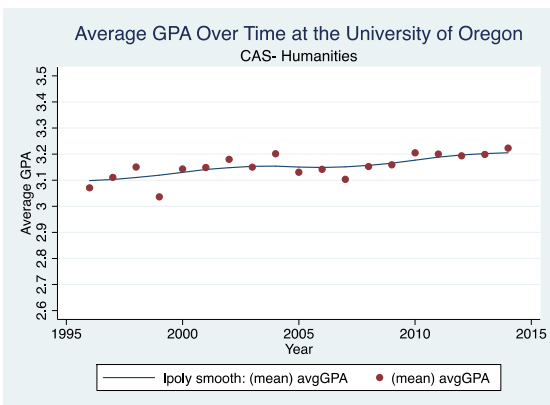
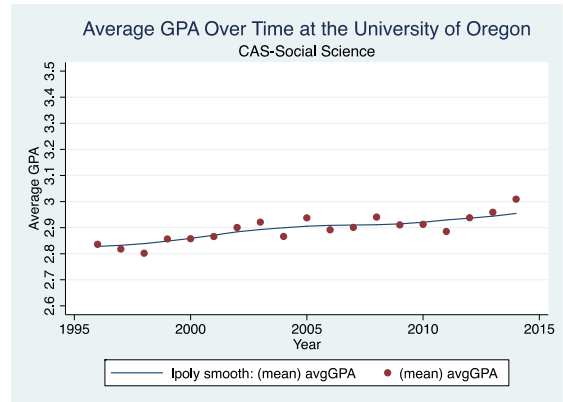
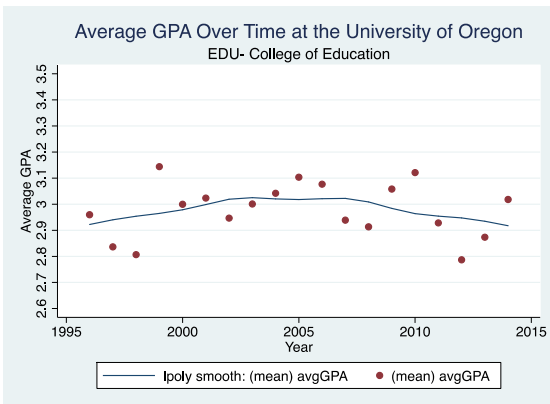


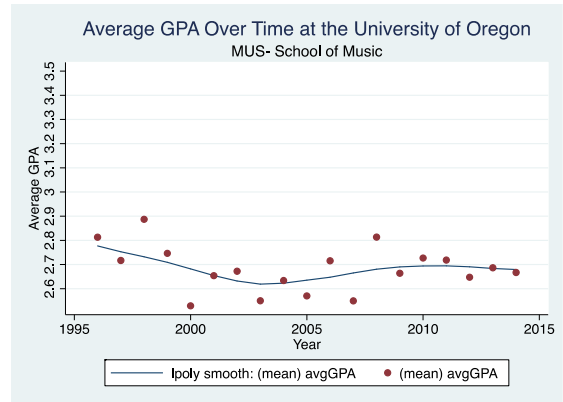
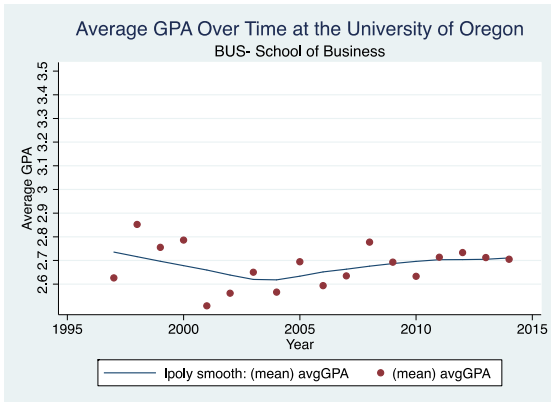
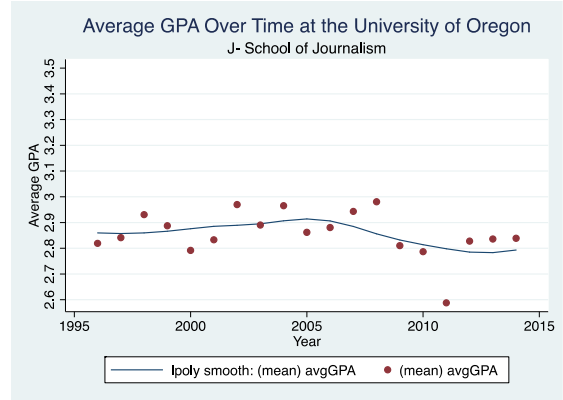
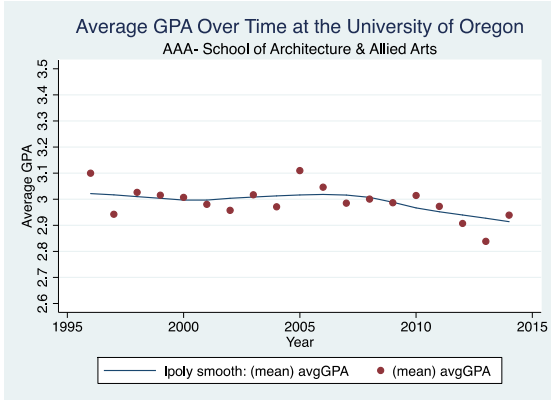




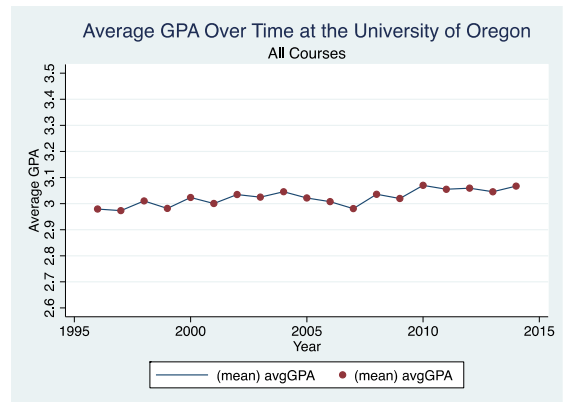
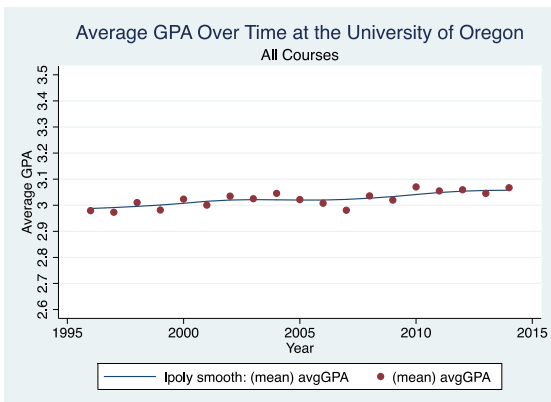


BY COLLEGE DIVISION





OVERALL GPA TREND AT THE UNIVERSITY OF OREGON



COMPARISON OF PERCENT OF AS TO Ds & Fs BY ACADEMIC DIVISION

Unit	Year Span	Total A (%)	Total D/F (%)
CAS-Natural Science	1996-2000	32.23	10.27
	2001-2005	34.12	9.12
	2006-2010	31.35	10.79
	2011-2014	31.85	10.71
	Percentage Change	(-).38	(+) .44

Note: CAS-Natural Science includes Biology, Chemistry, Computer & Information Sciences, Geology, Human Physiology, Mathematics, Physics, and Psychology.

Unit	Year Span	Total A (%)	Total D/F (%)
CAS-Social Science	1996-2000	31.05	8.60
	2001-2005	32.10	8.90
	2006-2010	31.35	9.64
	2011-2014	31.13	8.21
	Percentage Change	(+) .08	(-) .39

Note: CAS-Social Science includes Anthropology, Asian Studies, Economics, Environmental Sciences, Ethnic Studies, Geography, History, International Studies, Latin American Studies, Political Science, Sociology, and Women & Gender Studies.

Unit	Year Span	Total A (%)	Total D/F (%)
CAS-Humanities	1996-2000	37.33	3.81
	2001-2005	41.72	3.40
	2006-2010	40.18	3.79
	2011-2014	39.70	3.48
	Percentage Change	+) 2.37	-) .33

Note: CAS-Humanities includes Arabic, Chinese, Classics, Comparative Literature, Danish, East Asian Language & Literature, English, Folklore, French, German, Humanities, Italian, Japanese, Judaic Studies, Korean, Latin, Linguistics, Norwegian, Philosophy, Portuguese, Religious Studies, Russian, Scandinavian, Spanish, Swahili, Swedish, and Theatre Arts.

Unit	Year Span	Total A (%)	Total D/F (%)
AAA- School of Architecture and Allied Arts	1996-2000	32.64	7.82
	2001-2005	39.24	7.86
	2006-2010	38.49	6.99
	2011-2014	34.90	6.95

	Percentage Change	(+) 2.26	(-) .87
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Note: AAA includes Arts & Administration Programs, Architecture, Art, Landscape Architecture, Planning, Public Policy and Management, and Art History.

Unit	Year Span	Total A (%)	Total D/F (%)
BUS- School of Business	1996-2000	28.98	12.94
	2001-2005	24.05	16.52
	2006-2010	27.81	15.58
	2011-2014	28.86	13.64
	Percentage Change	(-) .12	(+) .70

Note: BUS only includes Business courses.

Unit	Year Span	Total A (%)	Total D/F (%)
EDU- College of Education	1996-2000	35.94	10.77
	2001-2005	34.30	7.80
	2006-2010	36.66	9.77
	2011-2014	34.65	6.61
	Percentage Change	(-) 1.29	(-) 4.16

Note: EDU includes Family & Human Services and Education Studies.

Unit	Year Span	Total A (%)	Total D/F (%)
JOU- School of Journalism	1996-2000	29.71	7.57
	2001-2005	31.27	8.99
	2006-2010	29.49	7.78
	2011-2014	27.37	10.22
	Percentage Change	(-) 2.34	(+) 2.65

Note: JOU includes Journalism.

Unit	Year Span	Total A (%)	Total D/F (%)
MUS- School of Music	1996-2000	33.86	10.06
	2001-2005	29.72	11.69
	2006-2010	30.36	11.90
	2011-2014	32.41	9.51
	Percentage Change	(-) 1.45	(-) .55

Note: MUS includes Music Jazz Studies and Music.

Unit	Year Span	Total A (%)	Total D/F (%)
Overall	1996-2000	34.59	6.88
	2001-2005	37.18	6.68
	2006-2010	36.00	7.23
	2011-2014	35.55	6.93
	Percentage Change	(+) .96	(+) .05

REGRESSION ANALYSIS

Average GPA on College Divisions

Source	SS	df	MS	Number of obs	=	20,523
Model	402.857644	7	57.551092	F(7, 20515)	=	502.04
Residual	2351.72062	20,515	.1146342	Prob > F	=	0.0000
				R-squared	=	0.1463
				Adj R-squared	=	0.1460
Total	2754.57826	20,522	.134225624	Root MSE	=	.33858

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
NSdiv	-.1621616	.007008	-23.14	0.000	-.1758979 -.1484253
HUMdiv	.1872338	.0055966	33.46	0.000	.176264 .1982035
AAAdiv	.0490237	.0123452	3.97	0.000	.0248262 .0732212
BAdiv	-.3283335	.0267022	-12.30	0.000	-.3806719 -.2759951
Jdiv	-.1412551	.0186203	-7.59	0.000	-.1777523 -.1047579
MUSdiv	-.171693	.0176693	-9.72	0.000	-.2063263 -.1370597
YEAR	.0010032	.00043	2.33	0.020	.0001604 .001846
_cons	3.009944	.0042834	702.69	0.000	3.001548 3.01834

Predicted GPA vs Average GPA

table Subj, c(mean predictedgpa mean avgGPA mean GPAdiff) format(%6.2f)

Subj	mean(predic~a)	mean(avgGPA)	mean(GPAdiff)
AAD	3.06	3.24	0.18
ANTH	2.98	2.91	-0.07
ARB	3.33	3.34	0.01
ARCH	3.19	3.43	0.24
ARH	2.91	2.82	-0.09
ART	2.74	2.78	0.04
ASIA	3.10	3.27	0.17
ASL	3.17	3.34	0.17
ASTR	2.79	2.85	0.06
BA	2.70	2.68	-0.02
BE	2.73	2.52	-0.21
BI	2.84	2.79	-0.05
CAS	3.18	3.47	0.30
CH	2.76	2.77	0.02
CHN	3.20	3.31	0.10
CINE	3.28	3.39	0.11
CIS	2.84	2.88	0.04
CLAS	3.02	2.89	-0.12
COLT	3.15	3.22	0.07
DAN	3.14	3.24	0.10
EALL	2.94	3.17	0.23
EC	2.82	2.74	-0.08
EDST	2.84	3.03	0.19
EDUC	2.79	2.73	-0.06
ENG	3.18	3.09	-0.09
ENVS	2.82	2.79	-0.03
ES	2.97	3.03	0.07
FHS	2.82	2.78	-0.04

FLR	3.19	3.14	-0.05
FR	3.20	3.28	0.07
GEOG	2.91	2.90	-0.02
GEOI	2.97	2.93	-0.04
GER	3.14	3.26	0.12
GRK	3.27	3.57	0.31
HBRW	3.16	3.34	0.18
HC	3.18	3.47	0.29
HIST	3.02	2.93	-0.09
HPHY	2.77	2.79	0.02
HUM	2.97	2.92	-0.05
INTL	3.01	3.13	0.12
ITAL	3.18	3.16	-0.03
J	2.95	2.87	-0.08
JDST	3.17	3.33	0.16
JPN	3.31	3.25	-0.06
KRN	3.32	3.55	0.23
LA	2.85	3.06	0.20
LAS	3.10	3.15	0.05
LAT	3.27	3.33	0.06
LING	2.86	2.96	0.10
MATH	3.10	2.85	-0.24
MUJ	2.91	2.52	-0.40
MUS	2.91	2.88	-0.03
NORW	3.16	3.10	-0.06
PHIL	2.93	2.99	0.06
PHYS	2.83	2.93	0.10
PORT	3.31	3.50	0.19
PPPM	2.89	3.06	0.17
PS	2.87	2.82	-0.05
PSY	2.83	2.81	-0.02
REES	3.27	3.60	0.33
REL	3.06	3.01	-0.05
RUSS	3.24	3.44	0.20
SCAN	3.12	3.26	0.14
SOC	2.93	2.90	-0.03
SPAN	3.20	3.30	0.10
SWAH	3.34	3.19	-0.15
SWED	3.17	3.35	0.19
TA	2.95	2.96	0.01
WGS	3.13	3.17	0.04

Average GPA Regression per Subject

Source	SS	df	MS	Number of obs	=	20,523
Model	1232.17483	78	15.7971132	F(78, 20444)	=	212.14
Residual	1522.40343	20,444	.074467004	Prob > F	=	0.0000
				R-squared	=	0.4473
				Adj R-squared	=	0.4452
Total	2754.57826	20,522	.134225624	Root MSE	=	.27289

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
AAD	.2311209	.0185748	12.44	0.000	.1947128 .267529
ANTH	-.0631074	.0158758	-3.98	0.000	-.0942252 -.0319896
ARB	.1039428	.0481526	2.16	0.031	.0095599 .1983257
ARCH	.1613147	.2737794	0.59	0.556	-.3753149 .6979443
ARH	-.1051992	.0192548	-5.46	0.000	-.1429401 -.0674583
ART	.0338383	.0492328	0.69	0.492	-.062662 .1303386
ASIA	.1828494	.0870558	2.10	0.036	.0122131 .3534857
ASL	.2139966	.0363211	5.89	0.000	.1428043 .2851888
ASTR	.0572911	.0211936	2.70	0.007	.01575 .0988322
BA	-.0326939	.0250981	-1.30	0.193	-.0818882 .0165005
BE	-.2252273	.1581035	-1.42	0.154	-.5351227 .0846682
BI	-.0655639	.0183637	-3.57	0.000	-.1015583 -.0295696
CAS	.3607716	.06247	5.78	0.000	.2383254 .4832177
CH	-.0092969	.021358	-0.44	0.663	-.0511603 .0325666
CHN	.1567761	.0209148	7.50	0.000	.1157815 .1977707
CINE	.1572715	.1933473	0.81	0.416	-.2217048 .5362477
CIS	.025438	.020495	1.24	0.215	-.0147339 .0656099
CLAS	-.122718	.0270513	-4.54	0.000	-.1757408 -.0696952
COLT	.1130123	.0180059	6.28	0.000	.0777192 .1483053
DAN	.1311526	.0296403	4.42	0.000	.0730553 .1892499
EALL	.2281201	.0593503	3.84	0.000	.1117886 .3444515
EC	-.1049425	.01609	-6.52	0.000	-.1364801 -.0734049
EDST	.1840985	.0335254	5.49	0.000	.1183861 .2498109
EDUC	-.0790817	.1038538	-0.76	0.446	-.2826435 .1244802
ENG	-.0401918	.0136056	-2.95	0.003	-.0668599 -.0135237
ENVS	-.0484556	.0306609	-1.58	0.114	-.1085533 .0116421
ES	.0726136	.026515	2.74	0.006	.0206421 .1245851
FHS	-.0684079	.1038592	-0.66	0.510	-.2719802 .1351645
FLR	-.0159427	.0362842	-0.44	0.660	-.0870626 .0551773
FR	.1234583	.0151727	8.14	0.000	.0937185 .153198
GEOG	-.0310282	.0181765	-1.71	0.088	-.0666556 .0045993
GEOI	-.0289213	.0166922	-1.73	0.083	-.0616393 .0037967
GER	.1565122	.0169956	9.21	0.000	.1231994 .189825
GRK	.3586248	.1933483	1.85	0.064	-.0203533 .7376029
HBRW	.2316748	.1370403	1.69	0.091	-.0369351 .5002847
HC	.3444631	.0151039	22.81	0.000	.3148582 .374068
HIST	-.0854013	.014598	-5.85	0.000	-.1140146 -.0567881
HYPHY	.0078153	.0513185	0.15	0.879	-.0927731 .1084036
HUM	-.0362677	.0272686	-1.33	0.184	-.0897163 .017181
INTL	.126973	.0236232	5.37	0.000	.0806696 .1732763
ITAL	.0210871	.0192146	1.10	0.272	-.0165751 .0587492
J	-.0924569	.0184457	-5.01	0.000	-.128612 -.0563019
JDST	.1985986	.041131	4.83	0.000	.1179786 .2792185
JPN	.0201053	.0220765	0.91	0.362	-.0231665 .0633771
KRN	.3210833	.0440495	7.29	0.000	.2347428 .4074238
LA	-.1755285	.0714145	-2.46	0.014	-.0355504 .3155067
LAS	.0920526	.0739294	1.25	0.213	-.0528549 .2369602
LAT	.1039294	.0411546	2.53	0.012	.0232631 .1845957
LING	.0824886	.0194708	4.24	0.000	.0443243 .1206529
MATH	-.2146561	.013438	-15.97	0.000	-.2409956 -.1883166
MUJ	-.4299697	.0427418	-10.06	0.000	-.513747 -.3461923
MUS	-.0479487	.0185192	-2.59	0.010	-.0842479 -.0116496
NORW	-.0088971	.1121377	-0.08	0.937	-.2286959 .2109018
PHIL	.0590034	.0187608	3.15	0.002	.0222308 .0957761

PHYS	.0858589	.0175746	4.89	0.000	.0514112	.1203066
PORT	.2802448	.0778152	3.60	0.000	.1277208	.4327689
PPPM	.1541545	.043229	3.57	0.000	.0694222	.2388868
PS	-.0668456	.0155017	-4.31	0.000	-.0972302	-.0364609
REES	.3762929	.2731606	1.38	0.168	-.1591237	.9117095
REL	-.03769	.0214247	-1.76	0.079	-.0796841	.0043041
RUSS	.2607131	.0246592	10.57	0.000	.2123792	.3090471
SCAN	.1610698	.0294807	5.46	0.000	.1032853	.2188543
SOC	-.043867	.0167864	-2.61	0.009	-.0767696	-.0109643
SPAN	.1485552	.0130634	11.37	0.000	.1229498	.1741605
SWAH	-.0515895	.0812732	-0.63	0.526	-.2108915	.1077125
SWED	.2335702	.0972885	2.40	0.016	.0428769	.4242634
late	.0481711	.0217642	2.21	0.027	.0055115	.0908306
early	-.0096907	.0052377	-1.85	0.064	-.019957	.0005756
YEAR	.0006062	.0003564	1.70	0.089	-.0000925	.0013048
large	-.1190805	.0085402	-13.94	0.000	-.1358199	-.102341
small	.2760507	.006038	45.72	0.000	.2642157	.2878857
threecr	.0447466	.0186708	2.40	0.017	.0081503	.0813428
fivecr	.1182314	.0167215	7.07	0.000	.0854559	.1510069
C200	.014019	.0064403	2.18	0.030	.0013956	.0266425
Copper	.1175235	.0067511	17.41	0.000	.1042909	.1307561
Winter	.0099214	.0046146	2.15	0.032	.0008764	.0189663
Spring	.0142355	.0046966	3.03	0.002	.0050297	.0234413
online	-.0836653	.0121025	-6.91	0.000	-.1073871	-.0599435
_cons	2.8201131	.0126649	222.67	0.000	2.795306	2.844955

Average GPA Regression per College Division

Source	SS	df	MS	Number of obs	=	20,523
				F(18, 20504)	=	611.99
Model	962.693463	18	53.4829702	Prob > F	=	0.0000
Residual	1791.8848	20,504	.087391963	R-squared	=	0.3495
				Adj R-squared	=	0.3489
Total	2754.57826	20,522	.134225624	Root MSE	=	.29562

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
late	.0698786	.0232798	3.00	0.003	.0242483 .1155088
early	-.0095802	.0056088	-1.71	0.088	-.0205739 .0014136
YEAR	.0009411	.0003815	2.47	0.014	.0001933 .0016889
large	-.109306	.0086549	-12.63	0.000	-.1262703 -.0923417
small	.3267389	.0050822	64.29	0.000	.3167774 .3367003
threecr	.0175088	.0198997	0.88	0.379	-.0214963 .0565138
fivecr	.1384176	.0106539	12.99	0.000	.1175352 .1593
C100	-.0128721	.0061342	-2.10	0.036	-.0248956 -.0008487
Copper	.0656607	.004905	13.39	0.000	.0560465 .0752749
Winter	.0056618	.0049899	1.13	0.257	-.0041187 .0154424
Spring	.0110265	.0050768	2.17	0.030	.0010755 .0209774
NSdiv	-.1687289	.0064559	-26.14	0.000	-.181383 -.1560747
HUMdiv	.0245214	.0053772	4.56	0.000	.0139816 .0350611
AAAdiv	.058129	.0112336	5.17	0.000	.0361103 .0801478
BAdiv	-.0691105	.0245398	-2.82	0.005	-.1172104 -.0210106
Jdiv	-.108822	.0164094	-6.63	0.000	-.1409857 -.0766582
MUSdiv	-.1061388	.0155803	-6.81	0.000	-.1366773 -.0756002
online	-.0848056	.0117678	-7.21	0.000	-.1078715 -.0617397
_cons	2.86146	.0063573	450.11	0.000	2.848999 2.873921

Average GPA Regression at University Level

Source	SS	df	MS	Number of obs	=	20,523
Model	863.749918	12	71.9791598	F(12, 20510)	=	780.76
Residual	1890.82835	20,510	.092190558	Prob > F	=	0.0000
				R-squared	=	0.3136
				Adj R-squared	=	0.3132
Total	2754.57826	20,522	.134225624	Root MSE	=	.30363

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
late	.0719915	.0238631	3.02	0.003	.025218	.1187651
early	-.0175523	.0057471	-3.05	0.002	-.0288171	-.0062874
YEAR	.0006271	.0003916	1.60	0.109	-.0001405	.0013946
large	-.1214156	.0085542	-14.19	0.000	-.1381826	-.1046487
small	.3541432	.0047913	73.91	0.000	.3447518	.3635346
threecr	-.0761325	.020217	-3.77	0.000	-.1157595	-.0365056
fivecr	.1656656	.0108663	15.25	0.000	.1443669	.1869643
C100	-.0006797	.0061501	-0.11	0.912	-.0127344	.011375
Cupper	.100547	.0048398	20.78	0.000	.0910606	.1100334
Winter	.0039833	.0051227	0.78	0.437	-.0060575	.0140242
Spring	.0067353	.0052115	1.29	0.196	-.0034797	.0169503
online	-.0429154	.0114268	-3.76	0.000	-.0653128	-.0205179
_cons	2.811676	.0056777	495.21	0.000	2.800547	2.822805

Average GPA Regression per Subject (GE)

Source	SS	df	MS	Number of obs	=	19,031
Model	1164.26314	75	15.5235085	F(75, 18955)	=	207.42
Residual	1418.63091	18,955	.074842042	Prob > F	=	0.0000
				R-squared	=	0.4508
				Adj R-squared	=	0.4486
Total	2582.89405	19,030	.135727486	Root MSE	=	.27357

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
AAD	.2355039	.019057	12.36	0.000	.1981505 .2728572
ANTH	-.0573306	.0171982	-3.33	0.001	-.0910406 -.0236206
ARB	.10935	.0485072	2.25	0.024	.0142715 .2044286
ARCH	0	(omitted)			
ARH	-.1254025	.0204049	-6.15	0.000	-.1653979 -.085407
ART	.0353802	.0494731	0.72	0.475	-.0615914 .1323519
ASIA	0	(omitted)			
ASL	.2342868	.0374635	6.25	0.000	.160855 .3077186
ASTR	.0600804	.0215158	2.79	0.005	.0179076 .1022533
BA	-.0314679	.0253812	-1.24	0.215	-.0812174 .0182816
BE	-.2221286	.1585379	-1.40	0.161	-.532877 .0886198
BI	-.0653331	.0187988	-3.48	0.001	-.1021804 -.0284857
CAS	.3727316	.0627815	5.94	0.000	.2496743 .4957888
CH	-.0074848	.0216722	-0.35	0.730	-.0499643 .0349947
CHN	.1668049	.0213772	7.80	0.000	.1249036 .2087061
CINE	.1779584	.1938893	0.92	0.359	-.2020819 .5579988
CIS	.029439	.0208322	1.41	0.158	-.011394 .0702719
CLAS	-.1103853	.0273535	-4.04	0.000	-.1640006 -.05677
COLT	.1251717	.0185268	6.76	0.000	.0888576 .1614859
DAN	.1347309	.0305047	4.42	0.000	.074939 .1945227
EALL	.2343604	.0596051	3.93	0.000	.1175292 .3511916
EC	-.1029042	.0166959	-6.16	0.000	-.1356296 -.0701787
EDST	.1895159	.0338282	5.60	0.000	.1232096 .2558221
EDUC	-.0764564	.1041762	-0.73	0.463	-.280651 .1277381
ENG	-.0293787	.0144396	-2.03	0.042	-.0576815 -.0010758
ENVS	-.0447591	.0309238	-1.45	0.148	-.1053725 .0158542
ES	.0798361	.0290926	2.74	0.006	.0228121 .1368601
FHS	-.0661236	.1041851	-0.63	0.526	-.2703357 .1380885
FLR	-.0337415	.0695368	-0.49	0.628	-.1700399 .1025569
FR	.1376908	.0158137	8.71	0.000	.1066946 .168687
GEOG	-.0442371	.0197251	-2.24	0.025	-.0829001 -.0055742
GEOI	-.0191784	.0170858	-1.12	0.262	-.0526681 .0143112
GER	.1694992	.0175054	9.68	0.000	.1351871 .2038113
GRK	.3793431	.1938909	1.96	0.050	-.0007003 .7593866
HBRW	.2428434	.137455	1.77	0.077	-.0265806 .5122674
HC	.3609654	.0162407	22.23	0.000	.3291322 .3927987
HIST	-.1027468	.0165463	-6.21	0.000	-.135179 -.0703146
HYPHY	.0103735	.0515633	0.20	0.841	-.0906952 .1114422
HUM	-.0294411	.0289436	-1.02	0.309	-.0861731 .0272908
INTL	.1274484	.0330287	3.86	0.000	.0627091 .1921876
ITAL	.0344669	.0197265	1.75	0.081	-.0041988 .0731325
J	-.1078372	.0198845	-5.42	0.000	-.1468126 -.0688617
JDST	.2123603	.0414408	5.12	0.000	.1311326 .2935879
JPN	.0250093	.0229075	1.09	0.275	-.0198914 .0699101
KRN	.3280074	.0443977	7.39	0.000	.2409839 .415031
LA	.18146	.0716782	2.53	0.011	.0409642 .3219557
LAS	0	(omitted)			
LAT	.1246761	.0415127	3.00	0.003	.0433074 .2060448
LING	.0811969	.0199638	4.07	0.000	.042066 .1203278
MATH	-.2051073	.0140485	-14.60	0.000	-.2326437 -.1775709
MUJ	-.4178039	.0429912	-9.72	0.000	-.5020704 -.3335373
MUS	.0104777	.020779	0.50	0.614	-.0302509 .0512064
NORW	.0022277	.1125056	0.02	0.984	-.2182932 .2227487
PHIL	.0650686	.0192029	3.39	0.001	.0274292 .1027081
PHYS	.089649	.0179367	5.00	0.000	.0544915 .1248064
PORT	.2853994	.0781499	3.65	0.000	.1322186 .4385803
PPPM	.1593334	.04348	3.66	0.000	.0741087 .244558
PS	-.0711167	.0165088	-4.31	0.000	-.1034755 -.038758
REES	.3969599	.273887	1.45	0.147	-.1398829 .9338028
REL	-.0387991	.0221016	-1.76	0.079	-.0821202 .004522
RUSS	.2712986	.0254623	10.65	0.000	.2213902 .321207
SCAN	.1750374	.0302032	5.80	0.000	.1158364 .2342384

SOC	-.0430113	.0182226	-2.36	0.018	-.0787292	-.0072933
SPAN	.1636165	.0137944	11.86	0.000	.1365783	.1906548
SWAH	-.0473458	.0816236	-0.58	0.562	-.2073353	.1126437
SWED	.2443396	.0976265	2.50	0.012	.0529829	.4356963
late	.0360862	.0260907	1.38	0.167	-.0150539	.0872262
early	-.0098723	.0054322	-1.82	0.069	-.02052	.0007754
YEAR	.0006755	.0003717	1.82	0.069	-.000053	.001404
large	-.1167696	.008624	-13.54	0.000	-.1336735	-.0998657
small	.2675848	.0066971	39.96	0.000	.2544578	.2807117
threecr	.0487827	.0193361	2.52	0.012	.0108823	.0866832
fivecr	.1246397	.0170953	7.29	0.000	.0911313	.1581481
C200	.0150847	.0065391	2.31	0.021	.0022676	.0279019
Cupper	.1088388	.0070331	15.48	0.000	.0950533	.1226243
Winter	.0087756	.0047991	1.83	0.067	-.000631	.0181822
Spring	.0124258	.004887	2.54	0.011	.0028468	.0220048
online	-.079307	.0123345	-6.43	0.000	-.1034837	-.0551304
_cons	2.817483	.0132083	213.31	0.000	2.791593	2.843372

Average GPA Regression per College Division (GE)

Source	SS	df	MS	Number of obs	=	19,031
Model	904.916891	18	50.2731606	F(18, 19012)	=	569.61
Residual	1677.97716	19,012	.088258845	Prob > F	=	0.0000
				R-squared	=	0.3503
				Adj R-squared	=	0.3497
Total	2582.89405	19,030	.135727486	Root MSE	=	.29708

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
late	.0595795	.0280049	2.13	0.033	.0046875 .1144716
early	-.0077374	.0058246	-1.33	0.184	-.0191542 .0036794
YEAR	.0006802	.0003986	1.71	0.088	-.0001011 .0014614
large	-.1073588	.008735	-12.29	0.000	-.1244803 -.0902374
small	.3282788	.0054282	60.48	0.000	.3176389 .3389186
threecr	.0166243	.0206828	0.80	0.422	-.0239157 .0571643
fivecr	.1375966	.0107258	12.83	0.000	.1165731 .1586202
C100	-.0148041	.0061906	-2.39	0.017	-.0269383 -.0026699
Cupper	.0585023	.0052565	11.13	0.000	.048199 .0688056
Winter	.0047167	.005202	0.91	0.365	-.0054798 .0149131
Spring	.0083736	.0052937	1.58	0.114	-.0020026 .0187498
NSdiv	-.1681579	.0066555	-25.27	0.000	-.1812033 -.1551125
HUMdiv	.0275229	.0058994	4.67	0.000	.0159596 .0390862
AAAdiv	.055277	.0116431	4.75	0.000	.0324556 .0780985
BAdiv	-.0678527	.0246769	-2.75	0.006	-.1162217 -.0194837
Jdiv	-.1309673	.0180089	-7.27	0.000	-.1662664 -.0956682
MUSdiv	-.0682493	.0177491	-3.85	0.000	-.1030391 -.0334594
online	-.0810268	.0120053	-6.75	0.000	-.1045582 -.0574955
_cons	2.861383	.0065569	436.39	0.000	2.84853 2.874235

Average GPA Regression at the University Level (GE)

Source	SS	df	MS	Number of obs	=	19,031
Model	806.821317	12	67.2351097	F(12, 19018)	=	719.95
Residual	1776.07274	19,018	.093389039	Prob > F	=	0.0000
				R-squared	=	0.3124
				Adj R-squared	=	0.3119
Total	2582.89405	19,030	.135727486	Root MSE	=	.3056

avgGPA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
late	.0610985	.0287492	2.13	0.034	.0047475 .1174494
early	-.015719	.0059786	-2.63	0.009	-.0274375 -.0040004
YEAR	.0003887	.0004097	0.95	0.343	-.0004143 .0011917
large	-.1202754	.0086532	-13.90	0.000	-.1372364 -.1033144
small	.357076	.0050195	71.14	0.000	.3472374 .3669146
threecr	-.0742873	.0210497	-3.53	0.000	-.1155466 -.0330281
fivecr	.1650803	.0109673	15.05	0.000	.1435835 .1865771
C100	-.0011284	.0062098	-0.18	0.856	-.0133002 .0110434
Cupper	.0958131	.0052186	18.36	0.000	.0855843 .106042
Winter	.0029475	.005348	0.55	0.582	-.0075351 .0134301
Spring	.0041038	.0054426	0.75	0.451	-.0065641 .0147717
online	-.04141	.0116058	-3.57	0.000	-.0641584 -.0186615
_cons	2.811849	.0058746	478.65	0.000	2.800334 2.823364

Withdrawal Regression per Subject

Source	SS	df	MS	Number of obs	=	20,523
Model	214064.793	82	2610.54625	F(82, 20440)	=	254.65
Residual	209539.41	20,440	10.2514389	Prob > F	=	0.0000
				R-squared	=	0.5053
				Adj R-squared	=	0.5034
Total	423604.203	20,522	20.6414678	Root MSE	=	3.2018

W	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
AAD	-.0996459	.2593104	-0.38	0.701	-.607915 .4086233
ANTH	.2004063	.2297403	0.87	0.383	-.249903 .6507156
ARB	.7379903	.582409	1.27	0.205	-.4035781 1.879559
ARCH	1.305359	3.215346	0.41	0.685	-4.996976 7.607695
ARH	1.680419	.2606331	6.45	0.000	1.169558 2.191281
ART	-.2486482	.5951225	-0.42	0.676	-1.415136 .9178394
ASTA	1.547727	1.031362	1.50	0.133	-.473824 3.569279
ASL	.6759093	.4498002	1.50	0.133	-.2057351 1.557554
ASTR	4.038962	.2858243	14.13	0.000	3.478724 4.599201
BA	-1.253793	.3219426	-3.89	0.000	-1.884827 -.62276
BE	-5.060174	1.860142	-2.72	0.007	-8.706202 -1.414146
BI	-.1840813	.2512404	-0.73	0.464	-.6765326 .30837
CAS	2.049125	.7506656	2.73	0.006	.5777605 3.52049
CH	1.738429	.2797212	6.21	0.000	1.190153 2.286705
CHN	-.2860911	.2816533	-1.02	0.310	-.8381542 .265972
CINE	2.263173	2.272941	1.00	0.319	-2.191973 6.718319
CIS	4.751303	.2787739	17.04	0.000	4.204883 5.297722
CLAS	1.908198	.3453974	5.52	0.000	1.231191 2.585204
COLT	1.257016	.2543662	4.94	0.000	.7584381 1.755595
DAN	.8866681	.3754434	2.36	0.018	.1507689 1.622567
EALL	.0362523	.7105904	0.05	0.959	-1.356562 1.429066
EC	.0078099	.2276253	0.03	0.973	-.4383538 .4539736
EDST	-1.906416	.416102	-4.58	0.000	-2.722009 -1.090823
EDUC	-2.271389	1.225067	-1.85	0.064	-4.672619 .1298413
ENG	1.265578	.2148595	5.89	0.000	.8444357 1.686719
ENVS	.439977	.3816342	1.15	0.249	-.3080566 1.188011
ES	1.22661	.3413938	3.59	0.000	.5574508 1.895769
FHS	-.8677422	1.225518	-0.71	0.479	-3.269886 1.534371
FLR	.9558899	.4473446	2.14	0.033	.0790586 1.832721
FR	.8216068	.2287137	3.59	0.000	.3733096 1.269904
GEOG	.0610084	.2518433	0.24	0.809	-.4326246 .5546414
GEOI	-.2929503	.2371291	-1.24	0.217	-.7577423 .1718416
GER	.639322	.2449996	2.61	0.009	.1591033 1.119541
GRK	-.3494621	2.273188	-0.15	0.878	-4.805093 4.106169
HBRW	.6035845	1.614477	0.37	0.709	-2.56092 3.768089
HC	.7442127	.2321259	3.21	0.001	.2892273 1.199198
HIST	1.399022	.2176169	6.43	0.000	.9724759 1.825569
HYPHY	-1.890174	.6169263	-3.06	0.002	-3.099399 -.680949
HUM	2.595843	.3475994	7.47	0.000	1.91452 3.277165
INTL	-.3443073	.3076263	-1.12	0.263	-.9472794 .2586649
ITAL	.7763916	.2678211	2.90	0.004	.2514408 1.301342
J	-.6438683	.2518076	-2.56	0.011	-1.137431 -.1503052
JDST	1.579634	.503252	3.14	0.002	.5932195 2.566048
JPN	-.5054568	.292506	-1.73	0.084	-1.078792 .0678784
KRN	.1948165	.5360947	0.36	0.716	-.8559721 1.245605
LA	.4870781	.8485668	0.57	0.566	-1.176181 2.150337
LAS	1.235799	.8794063	1.41	0.160	-.4879082 2.959505
LAT	1.083174	.5030968	2.15	0.031	.0970638 2.069284
LING	2.694994	.2697748	9.99	0.000	2.166213 3.223774
MATH	3.122031	.2122812	14.71	0.000	2.705942 3.538119
MUJ	-1.956823	.5180128	-3.78	0.000	-2.972169 -.941476
MUS	-.1053742	.2549973	-0.41	0.679	-.6051894 .394441
NORW	-.3567455	1.323715	-0.27	0.788	-2.951333 2.237842
PHIL	1.979838	.2580118	7.67	0.000	1.474114 2.485562
PHYS	.711003	.2483077	2.86	0.004	.2243 1.197706
PORT	1.060465	.9245328	1.15	0.251	-.7516937 2.872623
PPPM	.1386191	.525267	0.26	0.792	-.8909464 1.168184
PS	1.043203	.2247848	4.64	0.000	.6026063 1.483799
REES	2.231861	3.208269	0.70	0.487	-4.056604 8.520325
REL	1.035542	.2860969	3.62	0.000	.4747688 1.596315
RUSS	.710866	.3222104	2.21	0.027	.0793078 1.342424
SCAN	.6050322	.3730113	1.62	0.105	-.1260998 1.336164
SOC	-.610994	.2341009	-2.61	0.009	-1.069851 -.1521374
SPAN	.9229048	.2098685	4.40	0.000	.5115458 1.334264
SWAH	.2753131	.963975	0.29	0.775	-1.614155 2.164781

SWED	1.147002	1.150893	1.00	0.319	-1.108841	3.402846
TA	-.2814246	.3879925	-0.73	0.468	-1.041921	.4790718
WGS	1.138742	.3029966	3.76	0.000	.5448449	1.73264
avgGPA	-.9011149	.0828469	-10.88	0.000	-1.063502	-.7387283
late	.6108655	.2554052	2.39	0.017	.110251	1.11148
early	.227361	.0615279	3.70	0.000	.1067614	.3479605
YEAR	-.1209372	.0041939	-28.84	0.000	-.1291577	-.1127167
large	-.5850569	.1529299	-3.83	0.000	-.8848117	-.2853021
small	-.4714396	.0883907	-5.33	0.000	-.6446924	-.2981868
threecr	-1.332607	.2191122	-6.08	0.000	-1.762085	-.9031298
fivecr	.722884	.1966152	3.68	0.000	.3375025	1.108265
C100	-.5371689	.0769692	-6.98	0.000	-.6880346	-.3863031
Copper	.47551	.0598316	7.95	0.000	.3582353	.5927847
Winter	-.0758317	.0541654	-1.40	0.162	-.1820002	.0303368
Spring	-.1963912	.0551268	-3.56	0.000	-.3044441	-.0883383
online	2.705042	.1422851	19.01	0.000	2.426152	2.983932
Max	.0380223	.0007059	53.86	0.000	.0366387	.0394059
_cons	2.429105	.3315321	7.33	0.000	1.779276	3.078935

Withdrawal Regression per College Division

Linear regression, absorbing indicators

Number of obs	=	20,523
F(18, 20486)	=	971.57
Prob > F	=	0.0000
R-squared	=	0.4689
Adj R-squared	=	0.4680
Root MSE	=	3.3139

W	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
avgGPA	-1.292543	.0794312	-16.27	0.000	-1.448235	-1.136852
late	.2969477	.2611305	1.14	0.255	-.2148889	.8087843
early	.1714129	.0629094	2.72	0.006	.0481054	.2947203
small	-.4043021	.0737789	-5.48	0.000	-.5489147	-.2596895
threecr	-.942598	.2234293	-4.22	0.000	-1.380537	-.5046586
fivecr	-.5165359	.1200414	-4.30	0.000	-.7518266	-.2812452
C100	-.1383381	.0688856	-2.01	0.045	-.2733595	-.0033168
Copper	.2251728	.0554185	4.06	0.000	.1165481	.3337976
Winter	-.0373064	.0559405	-0.67	0.505	-.1469541	.0723414
Spring	-.1522828	.0569189	-2.68	0.007	-.2638485	-.0407172
NSdiv	1.459359	.0735767	19.83	0.000	1.315143	1.603576
HUMdiv	.2852856	.0604022	4.72	0.000	.1668924	.4036787
AAAdiv	-.018821	.1260831	-0.15	0.881	-.2659539	.2283119
BAdiv	-2.043091	.2712466	-7.53	0.000	-2.574756	-1.511426
Jdiv	-1.077824	.1841114	-5.85	0.000	-1.438697	-.7169512
MUSdiv	-.8918737	.1743786	-5.11	0.000	-1.23367	-.5500778
online	2.293581	.1322741	17.34	0.000	2.034313	2.552849
Max	.0329698	.0004468	73.79	0.000	.032094	.0338455
_cons	4.57001	.2550854	17.92	0.000	4.070022	5.069998

ABBREVIATIONS & IMPORTANT VARIABLES

AAdiv.....School of Architecture and Allied Arts dummy variable

A..... Number of A grades awarded per class

AM..... Number of A- grades awarded per class

AP..... Number of A+ grades awarded per class

Avail..... Number of spots available in a class

AvgGPA..... Average GPA

B..... Number of B grades awarded per class

BAdiv.....School of Business Administration dummy variable

BM..... Number of B- grades awarded per class

BP..... Number of B+ grades awarded per class

C100.....Dummy variable accounting for <200 level courses

C200..... Dummy variable accounting for 200 level courses

C..... Number of C grades awarded per class

CM..... Number of C- grades awarded per class

CP..... Number of C+ grades awarded per class

Creds..... Number of credits for a course

CRN..... Course Reference Number

Crse..... Course number

Cupper..... Dummy variable accounting for 300/400 level courses

D..... Number of D grades awarded per class

Day..... Days that a particular class was taught

DM..... Number of D- grades awarded per class

DP..... Number of D+ grades awarded per class

Early.....Dummy variable for courses starting before 10am

F..... Number of F grades awarded per class

Fivecr..... 5 credit course

Fourcr.....4 credit course

GE..... Dummy variable accounting for if a course was a General Education requirement
HUMdiv..... College of Humanities dummy variable

Identifyingcourse..... A completely unique (per observation) variable consisting of a combination of Subj, Crse, CRN, Term, and Year

Instructor..... Main person, or people, who led a class

Jdiv..... School of Journalism dummy variable

Late.....Dummy variable for courses ending after 7:50pm

Location..... Building and particular classroom where a course was taught

Max..... Number of students permitted in a class

MUSdiv.....School of Music dummy variable

N..... Number of No Pass awarded per class

NSdiv..... College of Natural Science dummy variable

Numb..... Course number

Online..... Online class at UO

Other..... Identifies number of grading outcomes that were not graded for a letter grade (A-F), pass/no pass, or withdrawn

P..... Number of Passes awarded per class

Quarter..... Identifies the quarter in which a course was taught

Spring..... Dummy variable accounting for courses being offered in Spring term

SSdiv.....College of Social Science dummy variable

Subj..... Subject

Term..... Term that a course was taught

Termnum..... Identifies a year a course was taught

Threecr..... 3 credit course

Time..... Start and end time for a course (24 hour time frame)

Title..... Title for a particular course

TNW..... Number of students who did not withdraw from a particular course

W..... Total number of students withdrawn from a particular course

Winter..... Dummy variable accounting for courses being offered in Winter term

Year..... Year in which a course was taken

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Courseinfo.dta, from the University of Oregon, 1996-2015.

Coursegrade.dta, from the University of Oregon, 1996-2015.

Undergraduate Grade Distributions (%) by Level for the 2014/2015 Academic Year,
from the University of Oregon, 2014/2015.

Distribution of Grades Awarded to Undergraduates, by Department, from the University
of Oregon, 2012-2015.