

Final Report from Academic Standards Committee's Exploration Plus/Minus Grading System – November 1, 2016

Our Charge

At the meeting of the Steering Committee on August 4, 2016, the Academic Standards Committee was charged to study whether Auburn should adopt a grading system that includes plus and minus grades.

In deciding whether to make such a recommendation, your committee should gather information about the grading systems used by some of our peer universities, including major universities in our region. It was suggested in the meeting that much of this data is already available in the Registrar's Office for the purpose of assigning transfer credit.

Our Process

We met August 29, September 26, and October 24, 2016 and we communicated over email.

First we reviewed SEC and SREB school grading practices, collecting data from the Transfer Evaluation System and school websites. See summary of data collected. (Constance – willing to share your notes?)

We then reviewed empirical literature on the topic. (see annotated bibliography)

We developed a summary of pros and cons from the literature and our perspectives (see Pros/Cons table)

We developed a Qualtrics survey to gather faculty and student opinions on a possible revision of our current whole letter grading system to a plus/minus grading system. (see final surveys)

We summarized the survey results (see survey results) – 620 Faculty (approximately 95% completed) and 2180 Students (approximately 81% completed) participated as of 10:00AM on October 25, 2016

We discussed and developed our recommendation based on peer institutions, published research, and survey results. The final draft of our recommendation will be approved over email.

Our Recommendation

Our committee recommends keeping the current, whole-letter grading system in place at Auburn University. Committee support for this decision is 100%.

Peer Institutions

The majority of our SEC and SREB peers (18/24, not including Auburn) use some version of plus/minus grading. In our review of our peers, we found that there were many different approaches to plus/minus grading. For example, some schools use A+ and others do not; some use C- and others do not; and some use pluses only. Auburn's use of whole letter grading places us in the minority among our peer institutions. However, as we reviewed the literature and

survey responses, we did not find a compelling reason to modify our grading system to some version of plus/minus.

Literature Review

The list of pro/cons that we developed from peer reviewed literature did not present a compelling argument for modifying our grading system here at Auburn. (Annotated Bibliography attached)

Plus/Minus Grading Scale

Pros	Cons
Better able to differentiate levels of student performance and gives a more accurate reflection of student performance ¹ (Morgan et al., 2007; Wilamowsky et al., 2008; Barnes & Buring, 2012; Fries et al. 2013; and Edgar et al., 2014)	Potential increase in students who want to challenge and/or negotiate for the next increase in letter grade ⁵ (Morgan et al. 2007; Barnes & Buring, 2012; Fries, et al. 2013)
Potential to increase student motivation ² (Morgan et al., 2007; Wilamowsky et al., 2008; and Barnes & Buring, 2012)	Students may have issue that there is no possibility of an A+ ⁶ (Morgan et al., 2007; Barnes & Buring, 2012; Edgar et al., 2014)
May reduce grade inflation ³ (Morgan et al., 2007; Wilamowsky et al., 2008)	Most students oppose a change to the +/- grading system ⁷ (Morgan et al., 2007; Fries, et al. 2013)
Makes students more competitive for employment and postgraduate programs ⁴ (Morgan et al., 2007; Edgar et al., 2014)	Student GPA's dropped in first year of change at Berry College (Edgar et al., 2014)
	Significant work will be involved to make a change at Auburn. Constance has a list of administrative implications
	Implications for both grad/undergrad students on probation – cutoff GPAs will need to change.

Survey Results

The survey results (Qualtrics Report attached) from our faculty and students did not support a compelling argument for modifying our grading system.

Survey Results Summary:

620 faculty participated, average response rate per question 93%, not including open-ended questions.

29% of respondents from College of Liberal Arts

13% of respondents from College of Engineering

10% of respondents from College of Sciences and Mathematics

All others less than 10%

Student Survey:

2180 students participated, average response rate was 81% per question, not including open-ended questions.

18% of respondents from College of Engineering

16% of respondents from the College of Business

16% of respondents from College of Science and Mathematics

15% of respondents from College of Liberal Arts

Percentage response per question by Faculty and Students

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
...more fair	FACULTY	10	9	14	26	41
	STUDENTS	63	17	6	8	6
...increases motivation	FACULTY	12	15	25	24	23
	STUDENTS	56	21	8	8	7
...important to grad school applications	FACULTY	13	15	31	21	20
	STUDENTS	57	20	13	5	5
...students more likely to challenge grades	FACULTY	7	19	19	28	26
	STUDENTS	44	13	12	16	16
...prefer to KEEP	FACULTY	25	22	20	11	22
	STUDENTS	4	4	5	7	80
...support a CHANGE	FACULTY	20	10	17	21	32
	STUDENTS	74	12	5	4	5

FACULTY support changing the grading system to plus/minus, but not overwhelmingly – 53% (agree/strongly agree); about 17% of the faculty are neutral and 30% disagree/strongly disagree with changing the current grading system.

Asked another way – 33% of faculty agree/strongly agree with the preference to keep our current grading system. 20% reported being neutral. And 47% strongly disagree/disagree with preferring to keep our current grading system.

Either way we ask the question, faculty responses are quite close (prefer to keep/support change).

Change: 47%/53%

Neutral: 20%/17%

Status Quo: 33%/30%

If we add the neutral respondents (not actively seeking change) to the status quo respondents, then we see approximately 53%/47% support the status quo and 47%/53% support making a change. Our faculty is split. This is not compelling justification for making a change from a faculty perspective. [Variation among colleges... Strong support to change from: College of Architecture, Design, and Construction-78%; College of Liberal Arts-61%; College of Human Sciences-59%; all others <50% support for change]

STUDENTS are united AGAINST making a change. 87%/86%, with 5% of students neutral, and only 8%/9% supporting a change towards plus/minus grading. [Student responses did not vary across college, year, or intent to apply for graduate school]

Academic Standards - Grading System Comparison
 Data collected from Transfer Evaluation System,
 Aug 29, 2016

SEC/SREB	Institution	Grading System - TES System Key	CR's notes
SEC	Missouri	plus/minus	A+=4.0/C-=1.7
SEC	Arkansas	Whole letter, 4pt	Whole grades https://registrar.uark.edu/faculty-staff/grading.php
SEC	Texas A&M	whole letter, 4pt	
SEC	LSU	plus/minus	Plus/minus began 2015; A+=4.3/C-=1.7
SEC	Miss State	whole letter, 4pt	
SEC	Ole Miss	plus/minus	Plus/minus began 2011; no A+/A=4.0/C-=1.7
SEC	Vanderbilt	plus/minus	A+=4.3/C-=1.7
SEC	Kentucky	plus/minus	A=4.0 (no A+); C-=1.7
SEC	Tennessee	plus/minus	A=4.0 (no A+); C-=1.7
SEC	Georgia	plus/minus	Plus/minus began 2006; A=4.0 (no A+); C-=1.7
SEC	Alabama	plus/minus	A+=4.33/C-=1.67
SEC	Auburn	whole letter, 4pt	
SEC	Florida	plus/minus	A=4.0 (no A+); C-=1.67
SEC	South Carolina	Plus only—no minus	A=4.0/B+=3.5/B=3/C+=2.5
SREB	Florida State	plus/minus	A=4.0 (no A+)/A-=3.75/B+=3.25/C-=1.75
SREB	Georgia Tech	whole letter, 4pt	
SREB	University of Maryland	plus/minus	Plus/minus began 2012/A+=4.0/A=4.0/C-=1.7
SREB	UNC	plus/minus	A=4.0/C-=1.7
SREB	North Carolina State	plus/minus	A+=4.333/C-=1.667
SREB	OSU	plus/minus	A=4.0 (no A+)/C-=1.7
SREB	University of Oklahoma	whole letter, 4pt	
SREB	Clemson University	whole letter, 4pt	whole letter, 4pt
SREB	UT at Austin	plus/minus	A=4.0 (no A+)/C-=1.67
SREB	Virginia Tech	plus/minus	A=4.0 (no A+)/C-=1.7
SREB	UVA	plus/minus	A+=4.0/A=4.0/C-=1.7

TOTALS:
 7 whole letter, 4pt
 18 plus/minus (some variation)

Plus/Minus Grading Scale

Pros	Cons
Better able to differentiate levels of student performance and gives a more accurate reflection of student performance ¹ (Morgan et al., 2007; Wilamowsky et al., 2008; Barnes & Buring, 2012; Fries et al. 2013; and Edgar et al., 2014)	Potential increase in students who want to challenge and/or negotiate for the next increase in letter grade ⁵ (Morgan et al. 2007; Barnes & Buring, 2012; Fries, et al. 2013)
Potential to increase student motivation ² (Morgan et al., 2007; Wilamowsky et al., 2008; and Barnes & Buring, 2012)	Students may have issue that there is no possibility of an A+ ⁶ (Morgan et al., 2007; Barnes & Buring, 2012; Edgar et al., 2014)
May reduce grade inflation ³ (Morgan et al., 2007; Wilamowsky et al., 2008)	Most students oppose a change to the +/- grading system ⁷ (Morgan et al., 2007; Fries, et al. 2013)
Makes students more competitive for employment and postgraduate programs ⁴ (Morgan et al., 2007; Edgar et al., 2014)	Student GPA's dropped in first year of change at Berry College (Edgar et al., 2014)
	Significant work will be involved to make a change at Auburn.
	Implications for both grad/undergrad students on probation – cutoff GPAs may need to change.

Barnes, K.D., & Buring, S.M. (2012). The effect of various grading scales on grade point averages. *American Journal of Pharmaceutical Education*, 76(3), 1-7.

The purpose of this study is to investigate the effects of using a +/- grading scale and to understand faculty and student perceptions of whole-letter and +/- grading scales on cumulative GPA in required courses.

Course directors submitted grading scales used in 2010 and compared them to grading scales used in 2005. Percentage grade for each student were also submitted and data were used to retrospectively calculate grades. Twenty-four faculty members and 351 students participated in a survey about their perceptions regarding the use of +/- grading system.

There were 9 different +/- grading scales being used during this 5-year period. Survey results showed that students felt the grade scale used should be consistent throughout the program. “Although most faculty members and students believed implementation of the +/- system would decrease GPA, the study showed no difference in cumulative-mean GPA (when calculated using retrospective application (p.7).

“A possible disadvantage of the use of the +/- system is the potential increase in students who want to negotiate for the next increase in letter grade. Twice as many students indicated that they were more likely to challenge their final letter grade if a +/- system were used for assessment rather than whole-letter grading scale (p.6).

Barnes et al. (2012) is in agreement with previous research from Morgan et al. (2007) and Wilamowsky et al. (2008) that identify three common reasons why universities implement a +/- grading system: (1) differentiating levels of student performance, (2) increasing student motivation, and (3) reducing grade inflation.

Edgar, L.D, Johnson, D.M., Graham, D.L., & Dixon, B.L. (2014). Student and faculty perceptions of plus/minus grading and its effect on course grade point averages. *College Student Journal*, 48, 184-197.

The purpose of this article to understand and compare student and faculty perceptions of the +/- grading system and to analyze the effects on course grade point average.

Participants included all ranked faculty that responded (82) and undergraduates with a major (338) stratified by department who were chosen using a random clustering sample. Researchers also did an analysis of 12 years of student grades. This included 5 years of data before and 7 years of data after the +/- system was implemented. After the first 5 years, the instructors were divided into three groups. One group stayed the same and kept using whole-letter grades, one group changed to +/- system, and the other group was mixed. The mixed group consisted of faculty that taught two of the same course and used a whole-letter scale for one class and a +/- scale for the other.

End of course GPAs for courses using the whole-letter grading system were higher throughout the whole study. The end of course GPA was lower for the courses that did switch to the +/- system. Research suggests “reverse grade inflation (p.195)” as the possible reason for the lower GPA with the implementation of the +/- system.

The survey indicated that some of the negative perceptions of the +/- system were due to the inconsistent use of grading systems during this study. They recommend using one grading system for all courses and stress the importance of instructors explaining how grades are earned in their course syllabus at the beginning of each semester. Some faculty and students felt there should be the possibility of an A+ in order to make them more competitive for scholarships, jobs, getting into graduate school, etc. (Barnes, et al. 2012). A majority of the faculty felt positive about the use of the +/- system.

Edgar et al.’s (2014) research includes the same reasons as Morgan et al. (2007) and Barnes et al. (2012) behind implementing +/- grading system: (1) differentiating levels of student performance, (2) increasing student motivation, and (3) reducing grade inflation. They also include student and faculty acceptance of this grading scale. Edgar et al uses Barnes et al.’s (2012) argument as to why the system used is so important, which is “because cumulative GPA condenses academic performance into a single statistic and is used to evaluate applicants for employment and post graduate programs (p. 185).

Edgar et al. (2014) use Vroom’s (1964) Expectancy Theory of Motivation to “suggest that students’ perceived view on an outcome will determine their level of motivation (p.186)”.

Fries, R.N., Krim, J.S., Conkin, J., & Smith, D.A. (2013). Student and faculty perceptions on plus-minus grading: A case study. *Educational Research Quarterly*, 36(4), 49-67.

The purpose of this article is to investigate whether faculty prefers whole-letter grading, which is currently used, or will they prefer a +/- grading system.

The committee did an analysis of peer institutions regarding their grading practices and policies by reviewing online handbooks and syllabi available online and a survey was conducted for all students and faculty at a university to ask them whether they prefer whole-letter grading, which is currently used, or if they would prefer a +/- grading system.

The committee analyzed 23 institutions. 12 used the whole-letter system, 7 used +/- system, and 4 reported using both. Of the 4 reporting both were used, 3 indicated it was up to the professors and 1 indicated that students were able to choose which system they wanted for each course they took.

Findings from the survey supported research of Morgan et al. (2007) and Wilamowsky et al. (2008): most students oppose a change to the +/- grading system. This did not support Morgan et al. (2007)'s 'resistance to change' theory as the reason and close to half the students that opposed the change felt the whole-letter system accurately reflected their performance. And even though more than half the faculty was in favor of changing the grading system, only 17% of students indicated being dissatisfied with the current grading system being used. This was enough reason for the faculty to stay with the whole-letter system along with the fact all faculty agreed changing would lead to an increase in the number of student grade appeals, which would increase their workload.

Morgan, J., Tallman, G., & Williams, R. (2007). *Students and faculty views of plus-minus grading systems* [White paper]. Retrieved September 7, 2016, from Northern Arizona University The W.A. Franke College of Business:
<http://franke.nau.edu/images/uploads/fcb/07-11.pdf>.

The purpose of this study is to understand how faculty and student perceptions of the benefits of a +/- grading system differ and the reasoning behind these differences.

The researchers did a review of studies of institutions and the prevalence of the plus/minus grading system. They also conducted surveys with faculty and students about their feelings about introducing a plus/minus grading system. An online Qualtrics survey was emailed to faculty while students were randomly asked questions as they were entering and exiting buildings on campus.

According to the American Association of College Registrar and Admissions Offices, 56% of two- and four-year colleges used a pluses or minuses in their grading system. Based on trends, they predict another 10% increase in the next 10 years.

Studies have shown three main reasons for changing to +/- system: (1) ability to differentiate student performance, (2) student motivation, and (3) possibly reduce grade inflation. These same reasons were discussed in Wilamowsky et al.'s (2008) research and were evident in Morgan's study. Over 50% of faculty were in support of introducing a +/- system while only 15% of students agreed. Although, they 'cited similar reasons.' (as listed above). A majority of students who were opposed thought that it would negatively affect their GPA and felt there was no reason for the change. Faculty who were opposed also felt change was unnecessary and also thought it would make grading more difficult. A majority of upper classmen and students with the highest average GPAs were strongly opposed. An explanation for the difference in perspective is based on the 'resistance to change theory' and the 'expectancy theory.'

"Student opposition to a +/- grading system could be reduced by implementing it in a phased manner (starting with a freshmen class) and finding a way to incorporate a grade of A+. In addition, resistance to change theory suggests that it is important that the reasons why the use of +/- grades might be in the best interest of students be effectively communicated throughout the process and that student groups should be involved early in any proposal to the institute. (p.12)."

Wilamowsky, Y., Dickman, B.H., & Epstein, S. (2008). The effect of plus/minus grading on GPA. *Journal of College Teaching & Learning*, 5(9), 1-7.

The purpose of this study is to investigate changing to a plus/minus grading system and the effects this has on overall student grade point average.

Student data was collected for an additional two semesters and analyzed along with data from a previous study at the same university, which was from two semesters before and two semesters after the change to a plus/minus grading system. The university had the plus system in place for two semesters before adopting the plus/minus system.

“The single most important reason for including plus and minus grades is to be able to differentiate between the performances of different students (p.1).”

“Simulation studies have shown that under certain conditions the reported grades are a more accurate reflection of student performance when using plus/minus grades. (p.1)”

“A number of studies have been done which imply that grade inflation is either eliminated or reduced with the introduction of plus/minus grades (p.1).”

Wilamowsky et al’s initial findings were consistent with the original study and found overall student GPA decreased after switching to the plus/minus grading system. However after the second year, overall student GPA returned to what it was before the plus/minus grading was implemented. This led researchers to analyze by course type: undergraduate, elective, and graduate, and then by department. There was only one department that had a decrease in GPA consistently with the adoption of the plus/minus grading. There seems to be other factors that could effect changes in student GPA when implementing new grading systems. Are instructors adjusting their grading to accommodate changes in grading system? There is more to learn about ‘the psychology of grading.’ What is happening within each department? Wilamowsky et al. suggest further research for any university considering making grading system changes.

References

- Barnes, K.D., & Buring, S.M. (2012). The effect of various grading scales on grade point averages. *American Journal of Pharmaceutical Education*, 76(3), 1-7.
- Edgar, L.D, Johnson, D.M., Graham, D.L., & Dixon, B.L. (2014). Student and faculty perceptions of plus/minus grading and its effect on course grade point averages. *College Student Journal*, 48, 184-197.
- Fries, R.N., Krim, J.S., Conkin, J., & Smith, D.A. (2013). Student and faculty perceptions on plus-minus grading: A case study. *Educational Research Quarterly*, 36(4), 49-67.
- Morgan, J., Tallman, G., & Williams, R. (2007). *Students and faculty views of plus-minus grading systems* [White paper]. Retrieved September 7, 2016, from Northern Arizona University The W.A. Franke College of Business:
<http://franke.nau.edu/images/uploads/fcb/07-11.pdf>.
- Wilamowsky, Y., Dickman, B.H., & Epstein, S. (2008). The effect of plus/minus grading on GPA. *Journal of College Teaching & Learning*, 5(9), 1-7.

Survey Questions from Articles

Barnes et al.'s (2012) sample survey items using a 4-point Likert-type scale (Strongly agree to Strongly disagree):

The following statements were given to both faculty and students:

- (1) Plus/minus grading leads to better student differentiation
- (2) I think it is important to differentiate between a grade of an 81% and 89%
- (3) Plus/minus grading is more fair than whole-letter grading.
- (4) Plus/minus grading increases motivation to learn.

The next two items were given to just students:

- (5) At the end of the quarter, prior to the final examination, you have earned an 84%.
Your effort in studying for the final examination may vary based on whether the grading scale is whole-letter grading or plus/minus.
- (6) If there is a limited possibility that I can increase my grade to the next letter grade, I will put in less time studying. (p.5)

Edgar et al.'s (2014) Qualtrics survey contained the following types of questions:

In two different surveys, faculty and students had several 5-point Likert-type scale items (strongly disagree to strongly agree) to assess their perceptions of the +/- system; one item asked the percentage of courses they completed or taught at the university that used the +/- system. Demographics for students: gender, academic classification, and cumulative GPA; demographics for faculty contained screening questions asking if they have used this system before in any course. If faculty used this grading system before, they were asked two more 5-point Likert-type scale (strongly disagree to strongly agree) questions about their use of the system. The last part asked for additional comments about any aspect of the grading system (p. 187-188)

More sample survey items using a 3-point Likert-type scale (Disagree, undecided, Agree):

I believe the grading system is fair to students.

I prefer a grading scale that has only straight letter grades (A,B,C,D, or F).

The +/- grading scale helps high-achieving students.

The +/- grading scale helps average students.

The +/- grading scale helps low-achieving students.

Overall, the +/- scale results in lower GPAs.

The +/- grading system allows instructors to better differentiate between students based on their performance.

I generally receive [students]/ give [faculty] give more 'plus' grades than 'minus' grades. (p.190)

Fries et al.'s (2013) sample survey questions:

“Which statement best describes your reason for being a) satisfied with the current whole-letter grading system or b) your dissatisfaction with the current whole-letter grading system (select all that apply)?”

Friends at other schools also receive whole-letter grades, I am used to whole-letter grades from high school and/or community college, The current grading system motivates me to work harder, Other (please explain). (p.60)

Sample question based on stratification:

If Satisfied, they were asked, “If you applied for jobs that asked for college transcript, do you feel that the current grading system helped you in any way (for example, being viewed more favorably)?

If Dissatisfied, “If you applied for jobs that asked for college transcript, do you feel that the current grading system would put you at a disadvantage in any way (for example, being viewed less favorably)?

Another 5-point Likert-type scale question (satisfied to dissatisfied) was asked based on student opinion of impact of whole-letter grading on competitiveness regarding a) their job obtainment and b) scholarship awards. (p.61)

If Dissatisfied, students were asked, “On average, how many times a year do you feel the current grading system inaccurately represented your final class grade on your transcript?” (p.62)

Wilamowsky et al.’s (2008) survey contained the following questions:

The variant of +/- grading system being considered is one that adds grades of A-, B+, B-, and C+ to the set of potential grades with + grades being recorded as .3 points higher than the base grade (ex. 3.3 points for a B+) and – grades being recorded as .3 points less than the base grade.

Respondents were asked whether they Favored, Opposed or Didn’t Know About or Care About a change to the grading system that would utilize the +/- grading scheme described above. Those who either Favored or Opposed were then asked to rate the strength of their opinions as either: Care only slightly, Care somewhat strongly or Care very strongly.

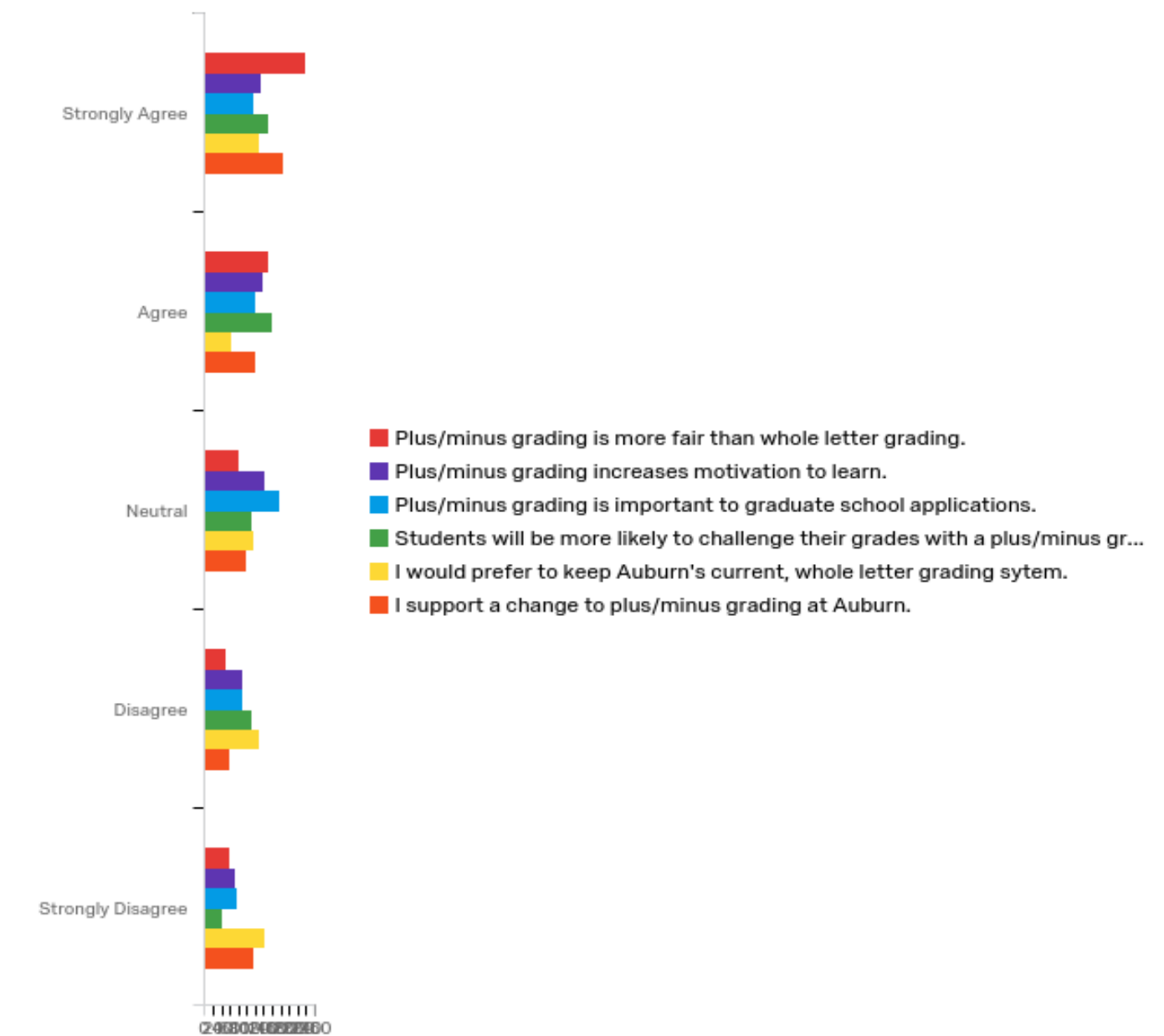
The results of these two questions were combined to produce a 7 point scale with values ranging from Very Strongly Support to Very Strongly Oppose. Respondents were also asked to describe the reasons for their support or opposition. Results of this open ended question were recorded and categorized with up to two reasons being recorded for each respondent. In addition, respondents were asked to provide additional information that might be related to their views of the proposed system. Students were asked to indicate their class standing, their GPA, and the college of their major. Faculty members were asked to indicate their college and their length of service at the university. (p. 5)

Default Report

Grading System FACULTY SURVEY

October 25th 2016, 10:16 am CDT

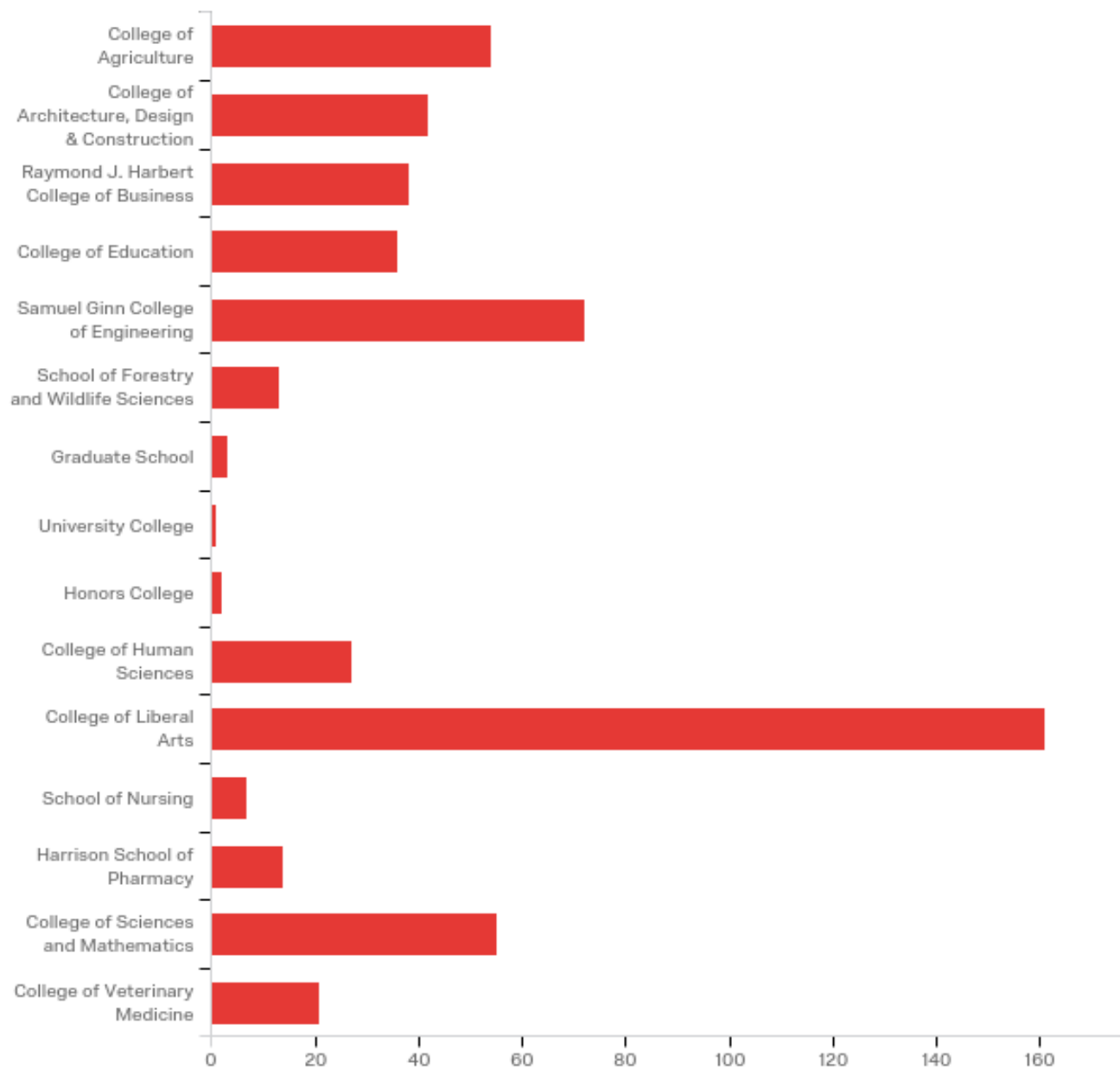
Q2 - Please read the following statements and indicate your level of agreement.



Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total
Plus/minus grading is	40.96 %	238	25.82%	150	14.11%	82	8.95%	52	10.15%	59	581

more fair than whole letter grading.											
Plus/minus grading increases motivation to learn.	23.28 %	135	24.14%	140	24.83%	144	15.34%	89	12.41%	72	580
Plus/minus grading is important to graduate school applications.	20.03 %	116	20.73%	120	30.74%	178	15.20%	88	13.30%	77	579
Students will be more likely to challenge their grades with a plus/minus grading system.	26.21 %	152	27.59%	160	19.48%	113	19.48%	113	7.24%	42	580
I would prefer to keep Auburn's current, whole letter grading sytem.	22.24 %	129	11.21%	65	19.66%	114	22.41%	130	24.48%	142	580
I support a change to plus/minus grading at Auburn.	32.07 %	186	21.03%	122	16.72%	97	10.34%	60	19.83%	115	580

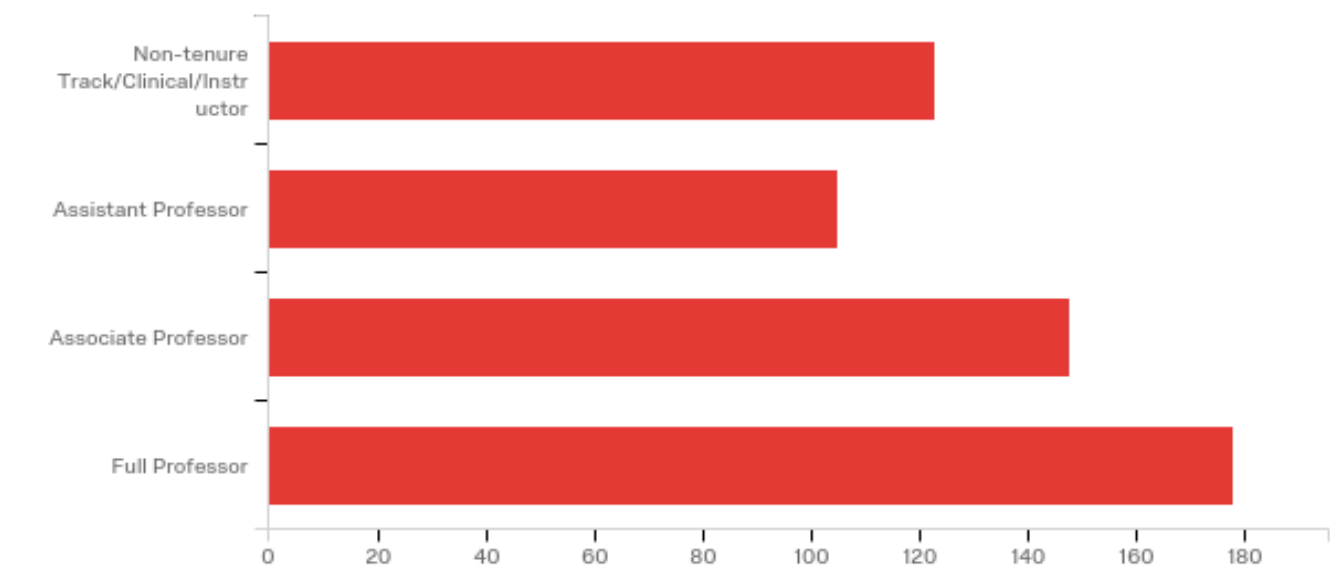
Q4 - Unit (College or School)



Answer	%	Count
College of Agriculture	9.89%	54
College of Architecture, Design & Construction	7.69%	42
Raymond J. Harbert College of Business	6.96%	38
College of Education	6.59%	36
Samuel Ginn College of Engineering	13.19%	72
School of Forestry and Wildlife Sciences	2.38%	13

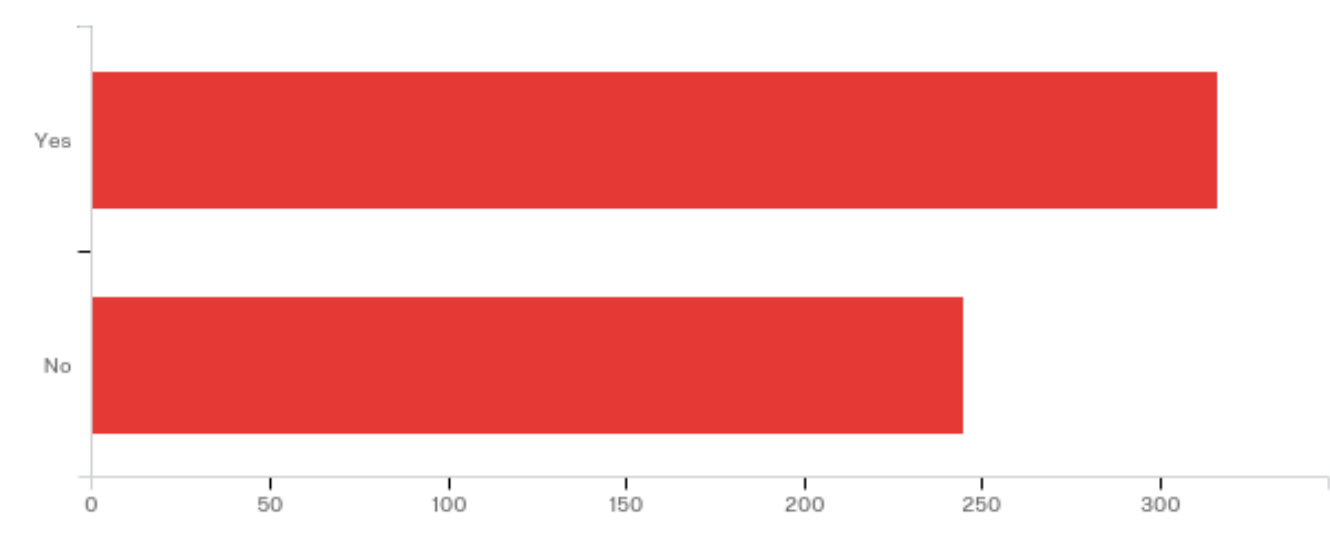
Graduate School	0.55%	3
University College	0.18%	1
Honors College	0.37%	2
College of Human Sciences	4.95%	27
College of Liberal Arts	29.49%	161
School of Nursing	1.28%	7
Harrison School of Pharmacy	2.56%	14
College of Sciences and Mathematics	10.07%	55
College of Veterinary Medicine	3.85%	21
Total	100%	546

Q5 - Rank



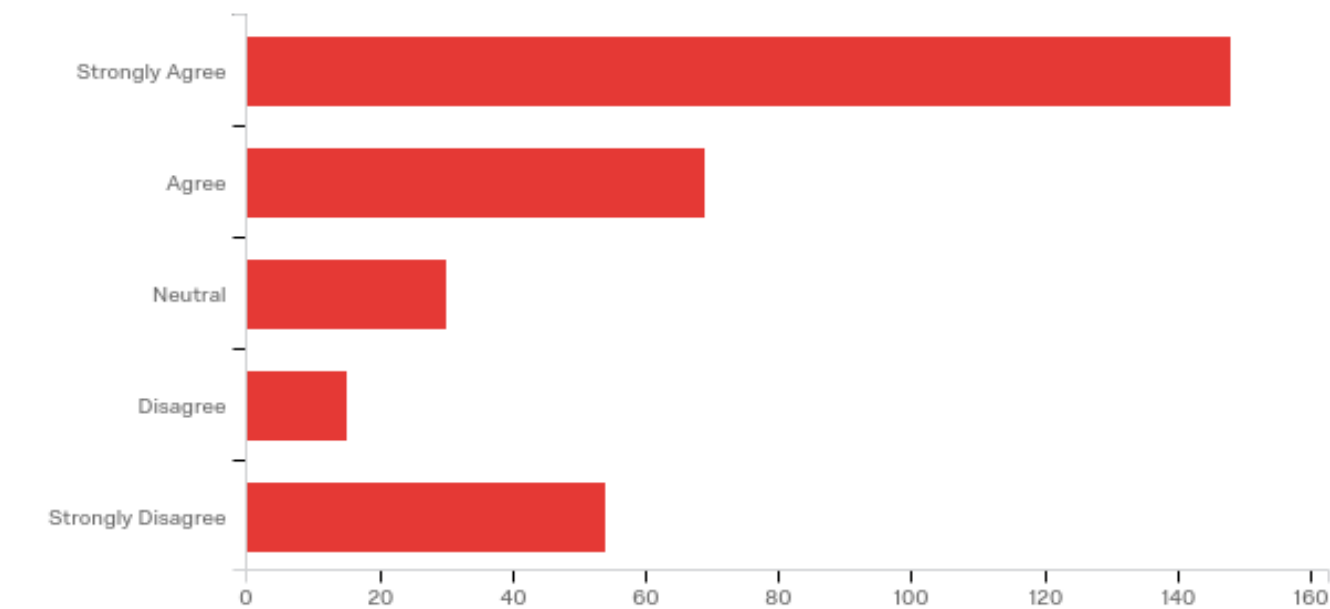
Answer	%	Count
Non-tenure Track/Clinical/Instructor	22.20%	123
Assistant Professor	18.95%	105
Associate Professor	26.71%	148
Full Professor	32.13%	178
Total	100%	554

Q6 - I have experience teaching at another university that used a plus/minus grading system.



Answer	%	Count
Yes	56.33%	316
No	43.67%	245
Total	100%	561

Q8 - I prefer a plus/minus grading system (respondents who taught at institution with plus/minus grading system)



Answer	%	Count
Strongly Agree	46.84%	148
Agree	21.84%	69
Neutral	9.49%	30
Disagree	4.75%	15
Strongly Disagree	17.09%	54
Total	100%	316

FINAL Faculty Crosstab College by Keep Current

		Please read the following statements and indicate your level of agreement. - I would prefer to keep Auburn's current, whole letter grading sytem.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Unit (College or School)	College of Agriculture	7 12.96%	8 14.81%	15 27.78%	12 22.22%	12 22.22%	54 100.00%
	College of Architecture, Design & Construction	3 7.14%	1 2.38%	5 11.90%	14 33.33%	19 45.24%	42 100.00%
	Raymond J. Harbert College of Business	15 39.47%	6 15.79%	7 18.42%	3 7.89%	7 18.42%	38 100.00%
	College of Education	9 25.00%	3 8.33%	7 19.44%	11 30.56%	6 16.67%	36 100.00%
	Samuel Ginn College of Engineering	26 36.11%	9 12.50%	15 20.83%	10 13.89%	12 16.67%	72 100.00%
	School of Forestry and Wildlife Sciences	2 16.67%	3 25.00%	2 16.67%	3 25.00%	2 16.67%	12 100.00%
	Graduate School	0 0.00%	1 33.33%	0 0.00%	1 33.33%	1 33.33%	3 100.00%
	University College	0 0.00%	1 100.00%	0 0.00%	0 0.00%	0 0.00%	1 100.00%
	Honors College	1 50.00%	0 0.00%	0 0.00%	0 0.00%	1 50.00%	2 100.00%
	College of Human Sciences	6 22.22%	3 11.11%	2 7.41%	11 40.74%	5 18.52%	27 100.00%
	College of Liberal Arts	29 18.01%	11 6.83%	23 14.29%	38 23.60%	60 37.27%	161 100.00%
	School of Nursing	1 14.29%	3 42.86%	0 0.00%	3 42.86%	0 0.00%	7 100.00%
	Harrison School of Pharmacy	3 21.43%	4 28.57%	5 35.71%	1 7.14%	1 7.14%	14 100.00%
	College of Sciences and Mathematics	12 22.22%	6 11.11%	14 25.93%	12 22.22%	10 18.52%	54 100.00%
	College of Veterinary Medicine	3 15.00%	4 20.00%	9 45.00%	1 5.00%	3 15.00%	20 100.00%
Total		117 21.55%	63 11.60%	104 19.15%	120 22.10%	139 25.60%	543 100.00%

		Please read the following statements and indicate your level of agreement. - I would prefer to keep Auburn's current, whole letter grading sytem.
Unit (College or School)	Chi Square	117.03*
	Degrees of Freedom	56
	p-value	0.00

**Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.*

FINAL Faculty Crosstab College by Change

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Unit (College or School)	College of Agriculture	14 25.93%	15 27.78%	13 24.07%	6 11.11%	6 11.11%	54 100.00%
	College of Architecture, Design & Construction	27 64.29%	8 19.05%	3 7.14%	4 9.52%	0 0.00%	42 100.00%
	Raymond J. Harbert College of Business	8 21.05%	6 15.79%	5 13.16%	5 13.16%	14 36.84%	38 100.00%
	College of Education	12 33.33%	5 13.89%	8 22.22%	5 13.89%	6 16.67%	36 100.00%
	Samuel Ginn College of Engineering	14 19.44%	13 18.06%	10 13.89%	9 12.50%	26 36.11%	72 100.00%
	School of Forestry and Wildlife Sciences	4 33.33%	2 16.67%	3 25.00%	2 16.67%	1 8.33%	12 100.00%
	Graduate School	1 33.33%	1 33.33%	0 0.00%	1 33.33%	0 0.00%	3 100.00%
	University College	0 0.00%	0 0.00%	0 0.00%	1 100.00%	0 0.00%	1 100.00%
	Honors College	1 50.00%	0 0.00%	0 0.00%	0 0.00%	1 50.00%	2 100.00%
	College of Human Sciences	7 25.93%	10 37.04%	3 11.11%	1 3.70%	6 22.22%	27 100.00%
	College of Liberal Arts	74 45.96%	32 19.88%	19 11.80%	10 6.21%	26 16.15%	161 100.00%
	School of Nursing	0 0.00%	2 28.57%	1 14.29%	3 42.86%	1 14.29%	7 100.00%
	Harrison School of Pharmacy	1 7.14%	3 21.43%	6 42.86%	1 7.14%	3 21.43%	14 100.00%
	College of Sciences and Mathematics	14 25.45%	14 25.45%	9 16.36%	7 12.73%	11 20.00%	55 100.00%
	College of Veterinary Medicine	3 15.79%	3 15.79%	9 47.37%	3 15.79%	1 5.26%	19 100.00%
Total		180 33.15%	114 20.99%	89 16.39%	58 10.68%	102 18.78%	543 100.00%

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.
Unit (College or School)	Chi Square	125.78*
	Degrees of Freedom	56
	p-value	0.00

**Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.*

FINAL Faculty Crosstab Rank by Change

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Rank	Non-tenure Track/Clinical/Instructor	28 22.95%	21 17.21%	25 20.49%	20 16.39%	28 22.95%	122 100.00%
	Assistant Professor	41 39.42%	25 24.04%	16 15.38%	12 11.54%	10 9.62%	104 100.00%
	Associate Professor	54 36.49%	31 20.95%	21 14.19%	12 8.11%	30 20.27%	148 100.00%
	Full Professor	62 34.83%	39 21.91%	27 15.17%	14 7.87%	36 20.22%	178 100.00%
Total		185 33.51%	116 21.01%	89 16.12%	58 10.51%	104 18.84%	552 100.00%

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.
Rank	Chi Square	21.17
	Degrees of Freedom	12
	p-value	0.05

FINAL Faculty Crosstab Experience by Change

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
I have experience teaching at another university that used a plus/minus grading system.	Yes	144 45.57%	67 21.20%	35 11.08%	14 4.43%	56 17.72%	316 100.00%
	No	40 16.39%	50 20.49%	55 22.54%	44 18.03%	55 22.54%	244 100.00%
	Total	184 32.86%	117 20.89%	90 16.07%	58 10.36%	111 19.82%	560 100.00%

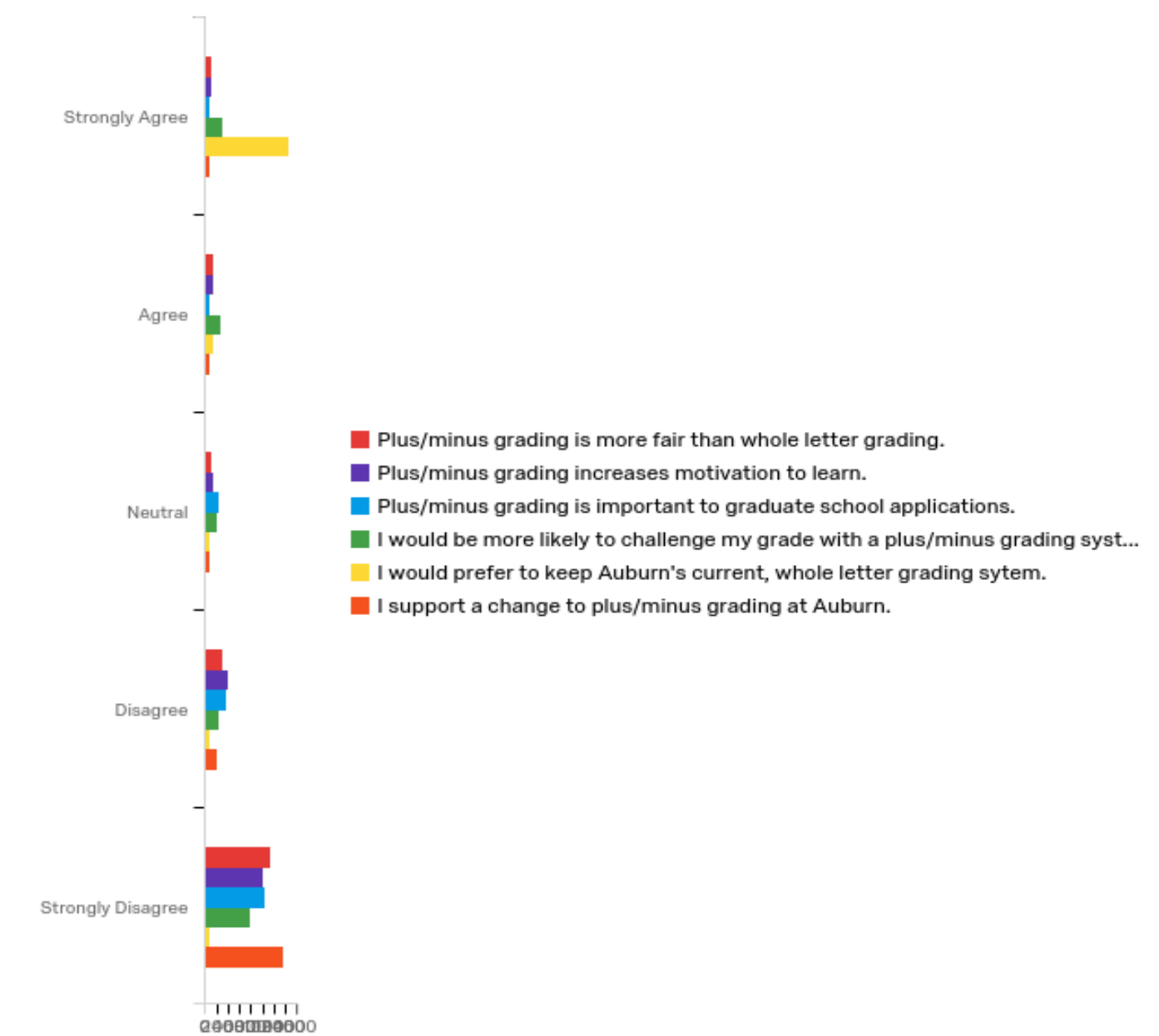
		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.
I have experience teaching at another university that used a plus/minus grading system.	Chi Square	73.18
	Degrees of Freedom	4
	p-value	0.00

Default Report

Grading System STUDENT SURVEY

October 25th 2016, 9:58 am CDT

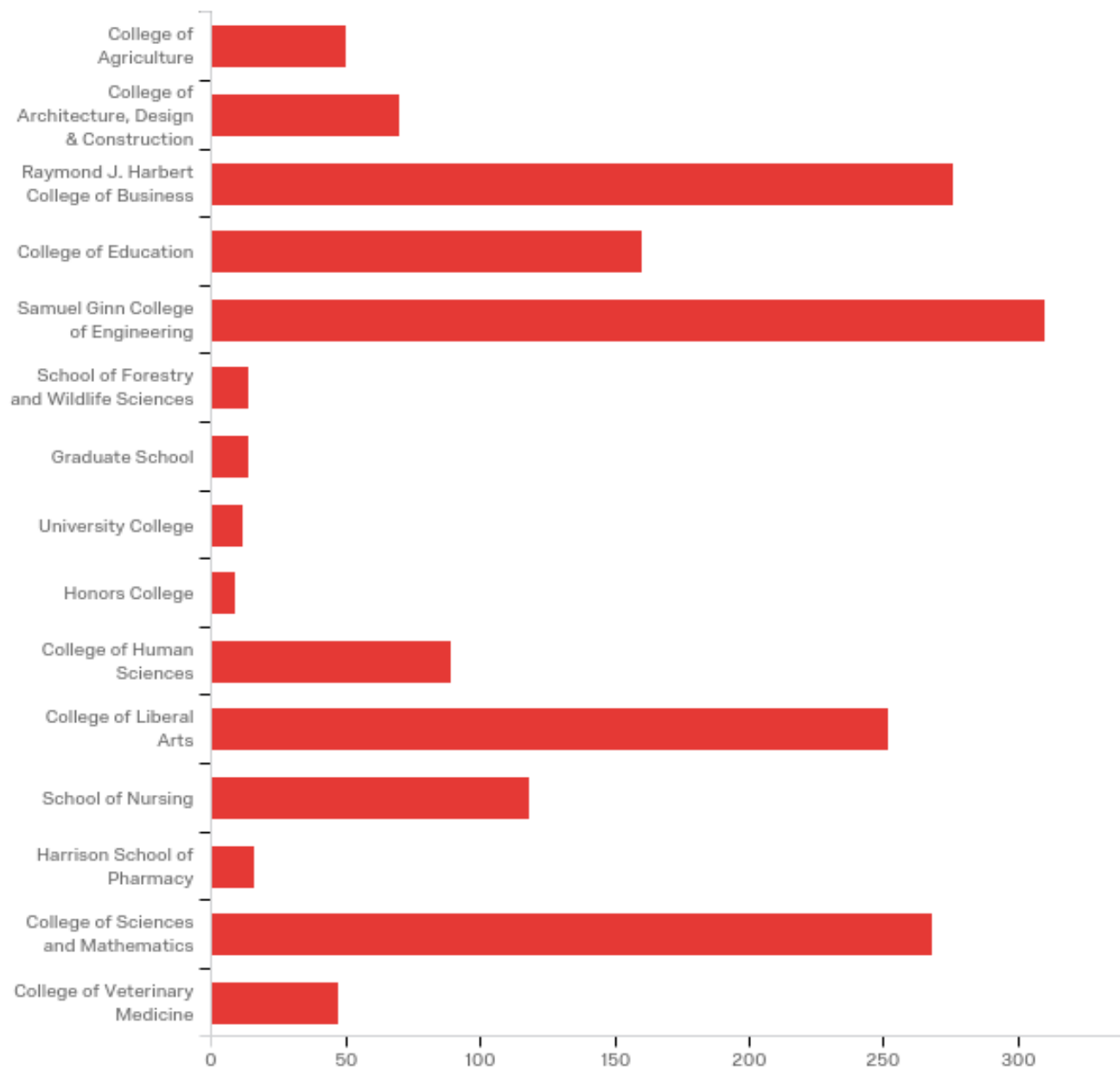
Q2 - Please read the following statements and indicate your level of agreement.



Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total
Plus/minus grading is	6.27%	115	8.35%	153	5.67%	104	16.80%	308	62.90%	1153	1833

more fair than whole letter grading.											
Plus/minus grading increases motivation to learn.	6.62%	121	8.48%	155	7.99%	146	21.12%	386	55.80%	1020	1828
Plus/minus grading is important to graduate school applications.	4.76%	87	4.60%	84	13.36%	244	20.25%	370	57.03%	1042	1827
I would be more likely to challenge my grade with a plus/minus grading system.	15.90 %	291	15.36%	281	11.80%	216	13.39%	245	43.55%	797	1830
I would prefer to keep Auburn's current, whole letter grading sytem.	80.34 %	1471	7.21%	132	4.81%	88	3.77%	69	3.88%	71	1831
I support a change to plus/minus grading at Auburn.	5.07%	93	4.20%	77	4.80%	88	11.50%	211	74.44%	1366	1835

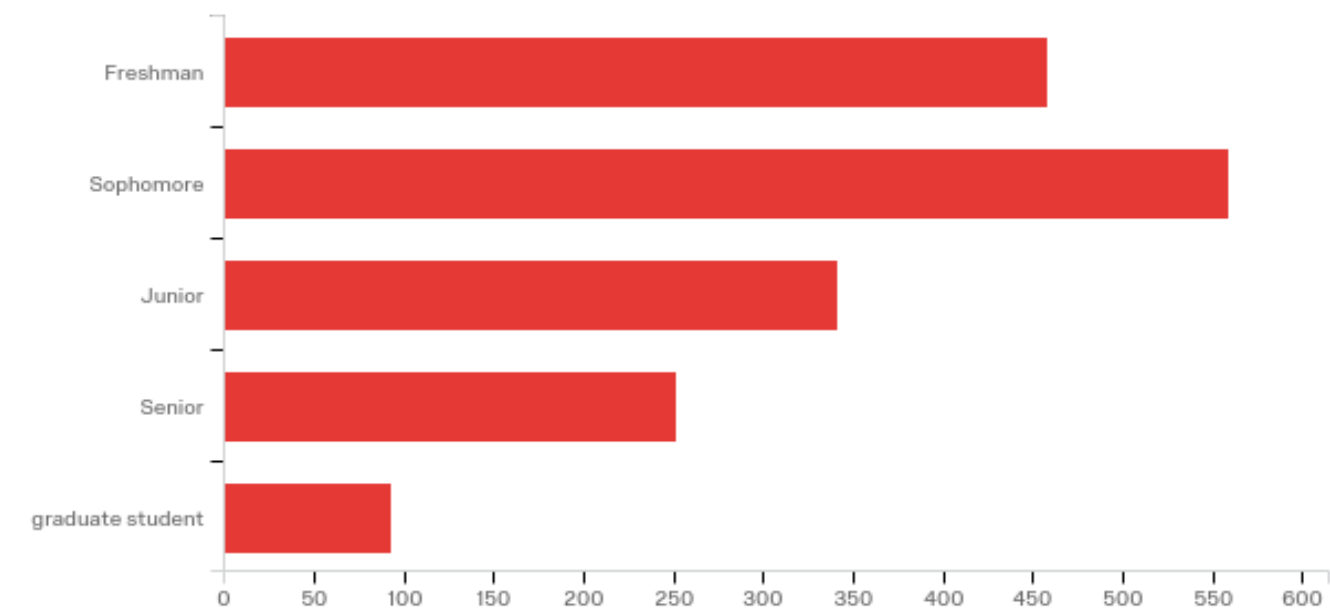
Q4 - Current College/School of your major



Answer	%	Count
College of Agriculture	2.93%	50
College of Architecture, Design & Construction	4.11%	70
Raymond J. Harbert College of Business	16.19%	276
College of Education	9.38%	160
Samuel Ginn College of Engineering	18.18%	310
School of Forestry and Wildlife Sciences	0.82%	14

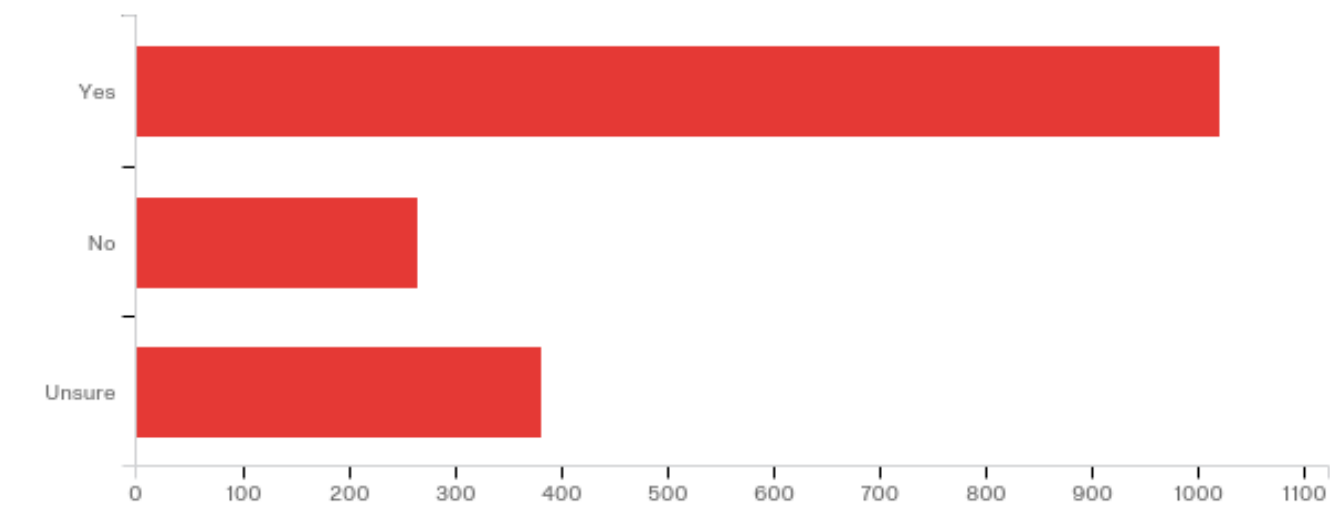
Graduate School	0.82%	14
University College	0.70%	12
Honors College	0.53%	9
College of Human Sciences	5.22%	89
College of Liberal Arts	14.78%	252
School of Nursing	6.92%	118
Harrison School of Pharmacy	0.94%	16
College of Sciences and Mathematics	15.72%	268
College of Veterinary Medicine	2.76%	47
Total	100%	1705

Q5 - Current academic standing



Answer	%	Count
Freshman	26.91%	458
Sophomore	32.84%	559
Junior	20.04%	341
Senior	14.75%	251
graduate student	5.46%	93
Total	100%	1702

Q6 - I intend to apply for graduate/professional school in the future.



Answer	%	Count
Yes	61.16%	1022
No	15.92%	266
Unsure	22.92%	383
Total	100%	1671

FINAL Student Crosstab College by Keep Whole Letter

		Please read the following statements and indicate your level of agreement. - I would prefer to keep Auburn's current, whole letter grading sytem.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Current College/School of your major	College of Agriculture	43 86.00%	0 0.00%	1 2.00%	4 8.00%	2 4.00%	50 100.00%
	College of Architecture, Design & Construction	52 75.36%	7 10.14%	2 2.90%	4 5.80%	4 5.80%	69 100.00%
	Raymond J. Harbert College of Business	219 79.06%	21 7.58%	16 5.78%	12 4.33%	9 3.25%	277 100.00%
	College of Education	128 79.50%	9 5.59%	8 4.97%	6 3.73%	10 6.21%	161 100.00%
	Samuel Ginn College of Engineering	240 77.67%	29 9.39%	18 5.83%	14 4.53%	8 2.59%	309 100.00%
	School of Forestry and Wildlife Sciences	13 92.86%	1 7.14%	0 0.00%	0 0.00%	0 0.00%	14 100.00%
	Graduate School	8 57.14%	0 0.00%	2 14.29%	2 14.29%	2 14.29%	14 100.00%
	University College	9 75.00%	1 8.33%	0 0.00%	1 8.33%	1 8.33%	12 100.00%
	Honors College	9 100.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	9 100.00%
	College of Human Sciences	77 88.51%	4 4.60%	4 4.60%	2 2.30%	0 0.00%	87 100.00%
	College of Liberal Arts	206 82.07%	15 5.98%	10 3.98%	9 3.59%	11 4.38%	251 100.00%
	School of Nursing	97 83.62%	5 4.31%	5 4.31%	3 2.59%	6 5.17%	116 100.00%
	Harrison School of Pharmacy	14 87.50%	0 0.00%	2 12.50%	0 0.00%	0 0.00%	16 100.00%
	College of Sciences and Mathematics	222 82.84%	22 8.21%	10 3.73%	4 1.49%	10 3.73%	268 100.00%
	College of Veterinary Medicine	35 74.47%	7 14.89%	0 0.00%	2 4.26%	3 6.38%	47 100.00%
Total		1372 80.71%	121 7.12%	78 4.59%	63 3.71%	66 3.88%	1700 100.00%

		Please read the following statements and indicate your level of agreement. - I would prefer to keep Auburn's current, whole letter grading sytem.
Current College/School of your major	Chi Square	63.82*
	Degrees of Freedom	56
	p-value	0.22

Student Crosstab College by Change

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Current College/School of your major	College of Agriculture	5 10.00%	3 6.00%	0 0.00%	5 10.00%	37 74.00%	50 100.00%
	College of Architecture, Design & Construction	5 7.25%	3 4.35%	1 1.45%	10 14.49%	50 72.46%	69 100.00%
	Raymond J. Harbert College of Business	16 5.82%	12 4.36%	16 5.82%	28 10.18%	203 73.82%	275 100.00%
	College of Education	11 6.83%	5 3.11%	7 4.35%	19 11.80%	119 73.91%	161 100.00%
	Samuel Ginn College of Engineering	14 4.52%	16 5.16%	20 6.45%	41 13.23%	219 70.65%	310 100.00%
	School of Forestry and Wildlife Sciences	0 0.00%	1 7.14%	0 0.00%	1 7.14%	12 85.71%	14 100.00%
	Graduate School	2 14.29%	3 21.43%	0 0.00%	1 7.14%	8 57.14%	14 100.00%
	University College	1 8.33%	0 0.00%	0 0.00%	4 33.33%	7 58.33%	12 100.00%
	Honors College	0 0.00%	0 0.00%	0 0.00%	1 11.11%	8 88.89%	9 100.00%
	College of Human Sciences	2 2.25%	3 3.37%	3 3.37%	8 8.99%	73 82.02%	89 100.00%
	College of Liberal Arts	13 5.18%	10 3.98%	13 5.18%	20 7.97%	195 77.69%	251 100.00%
	School of Nursing	6 5.13%	1 0.85%	5 4.27%	10 8.55%	95 81.20%	117 100.00%
	Harrison School of Pharmacy	0 0.00%	2 12.50%	0 0.00%	0 0.00%	14 87.50%	16 100.00%
	College of Sciences and Mathematics	9 3.36%	12 4.48%	12 4.48%	29 10.82%	206 76.87%	268 100.00%
	College of Veterinary Medicine	2 4.26%	1 2.13%	2 4.26%	8 17.02%	34 72.34%	47 100.00%
Total		86 5.05%	72 4.23%	79 4.64%	185 10.87%	1280 75.21%	1702 100.00%

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.
Current College/School of your major	Chi Square	60.63*
	Degrees of Freedom	56
	p-value	0.31

**Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.*

FINAL Student Standing by Change

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Current academic standing	Freshman	13 2.85%	17 3.73%	15 3.29%	40 8.77%	371 81.36%	456 100.00%
	Sophomore	28 5.00%	18 3.21%	24 4.29%	50 8.93%	440 78.57%	560 100.00%
	Junior	25 7.33%	11 3.23%	14 4.11%	35 10.26%	256 75.07%	341 100.00%
	Senior	15 5.98%	17 6.77%	19 7.57%	45 17.93%	155 61.75%	251 100.00%
	graduate student	6 6.45%	8 8.60%	5 5.38%	11 11.83%	63 67.74%	93 100.00%
Total		87 5.11%	71 4.17%	77 4.53%	181 10.64%	1285 75.54%	1701 100.00%

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.
Current academic standing	Chi Square	51.73*
	Degrees of Freedom	16
	p-value	0.00

*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

FINAL Student Crosstab Intent Grad by Change

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.					
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
I intend to apply for graduate/professional school in the future.	Yes	50 4.89%	41 4.01%	45 4.40%	99 9.68%	788 77.03%	1023 100.00%
	No	13 4.91%	17 6.42%	11 4.15%	34 12.83%	190 71.70%	265 100.00%
	Unsure	22 5.77%	15 3.94%	17 4.46%	49 12.86%	278 72.97%	381 100.00%
	Total	85 5.09%	73 4.37%	73 4.37%	182 10.90%	1256 75.25%	1669 100.00%

		Please read the following statements and indicate your level of agreement. - I support a change to plus/minus grading at Auburn.
I intend to apply for graduate/professional school in the future.	Chi Square	8.28
	Degrees of Freedom	8
	p-value	0.41