

STAT 113, FALL 2017: GRADING SYSTEM

A STANDARDS-BASED GRADING SYSTEM

Grading in this course will employ a system which is a variant of “Standards-Based Grading” or “Specifications Grading”. For a given grade, rather than accumulating “points”, you will need to demonstrate a specified level of depth and breadth of mastery across a range of specific learning objectives (SLOs).

Some advantages of this approach are that:

- “key concepts” are listed up front, so it should be clearer as you go what is essential and what is “FYI”
- you will be able to monitor your progress and summarize your end result in terms of concepts and skills rather than abstract points
- you will be able to do targeted reassessments of concepts and skills that you did not master the first time, so there is less pressure to succeed *immediately* and more emphasis on learning *eventually*
- I can more easily track who needs work in what areas, and what topics are most difficult for the class as a whole (and allocate review time and extra homework or quiz problems accordingly).

Downsides are that

- the system is unfamiliar
- it is not as easy to answer the question “what is my current letter grade?” part way through the semester

To the first point, I will periodically “check in” during class to make sure everyone is on the same page. See also the TL;DR summary of the grading system below. To the second point, this is somewhat by design, as it keeps the focus on what you need to do going forward, and not looking back on what you’ve already done. However, I will provide spreadsheets with some formulas filled in to make it easier to estimate roughly “where you stand”.

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SUMMARY OF GRADING SYSTEM

- Each graded item (e.g., homework, quiz, lab or exam question) is associated with one or more SLO (Specific Learning Objective).
- Levels of mastery per item per SLO are “*M*” for “Mastery” (4.0 for averaging purposes), “*M*⁻” for near-Mastery (3.0), “*P*” for progress (2.0), or “*N*” (0.0) for “not-assessable”.
- A separate grade is tracked for each SLO, which is the average of the grades on the top few items associated with that objective.
- 50% of the grade is based on Concepts SLOs. The grade for each SLO is the average of the two best items associated with that objective from a “major assignment” (quiz, exam, mini-project) and, if it brings the grade up, the one best homework item. If there is only one major assignment item associated with an objective, it counts as two in the average.
- Reassessment Quizzes for Concepts SLOs may be done by appointment. You may be reassessed on a maximum of 2 SLOs per week, through the end of reading period. Before doing a reassessment you must have made a good faith effort on any homework on that SLO.
- 20% of the grade is based on Methods SLOs, which are based on a start-to-end analysis. The top grade is used for each SLO, whether from homework, project or exam.
- 10% of the grade is based on Computing SLOs, which are based on fluency translating ideas into explicit computational terms. These are assessed on labs and the individual mini-project. Up to three items for each SLO count toward the grade.
- 20% of the grade comes from the group project, which is graded on 25 criteria on a 0-4 scale, for a total grade out of 100. Some criteria can be revised from one phase of the project to the next.

FINAL GRADE DETERMINATION

The SLO grades in each heading (Concepts, Methods, Computing, and Project) are averaged to obtain an overall grade for that component between 0 and 4. These in turn are averaged using the weights given above, to obtain an overall course grade on a 0-4 scale. Roughly, a 3.6 translates to an A, 3.4 to A-, 3.2 to B+, 3.0 to B, 2.8 to C+, 2.6 to C, 2.4 to C-, 2.2 to D+, and 2.0 to D.