



Week 5

Grading

DSC 95, Spring 2025 at UC San Diego

Agenda

- Grading.

Announcements:

- This week's homework:
 - [Discover the best approach.](#)
 - Host your session and submit reflection on Gradescope by Friday.
 - Grading practice, also on Gradescope.

Grading

What is the role of grading?

- A motivator.
 - People try harder if it's graded!
 - Theorem: if it's not **due** they won't **do** it.

What is the role of grading?

- A motivator.
 - People try harder if it's graded!
 - Theorem: if it's not **due** they won't **do** it.
- An indicator to students.
 - Whether they got the problem right or wrong.
 - Whether they understand the concepts.
 - How they are doing, absolutely and relatively.
 - What they need to know.

What is the role of grading?

- A motivator.
 - People try harder if it's graded!
 - Theorem: if it's not **due** they won't **do** it.
- An indicator to students.
 - Whether they got the problem right or wrong.
 - Whether they understand the concepts.
 - How they are doing, absolutely and relatively. —
 - What they need to know. —
- An indicator to instructors.
 - Is teaching working?
 - Are students following? —
 - What do students struggle with? •

Questions

- What are all the goals of grading you can think of?
- What issues do you think instructors have about the way tutors grade?

What are all the goals of grading you can think of?

- Students should know what they don't understand / what they did wrong
- give actionable feedback
- shape instructor behavior (which topics)

What issues do you think instructors have about the way tutors grade?

- Consistency (across tutors + within a tutor)
 - go back to first few assignments at end
 - rushing
- not identifying alternate correct solutions (grading for a specific solution)
- rubric (instructor should approve beforehand)

Example feedback

most important on first assignment

This looks like the right level of detail in your explanations, with the exception of the median property in problem 2 - that should be more detailed. Also, you might want to try using the provided LaTeX template on the course website. You'll get your pictures where you want them :)

Overall, good work!

Overall it looks like you should include more detail in your explanations. Here are some specific suggestions:

For problem 1, it's better to give a concrete counterexample. Your explanation just kind of says "there could be a data set where this is not true" but it's more convincing if you can find one such dataset.

For problem 2, parts a through c are all about the specific function $f(x) = 2x - 5$. You seem to be attempting a more general proof, but you need to use this specific function, because the statements are not necessarily true for all functions f .

Problem 2d should not use a specific data set. Your proof needs to be more general.

Problem 3c says the function is minimized there because it's the minimum on the graph, which is kind of circular logic. Instead, can you say *why* the graph's minimum is there?

- Grading on stuff that wasn't specified

Rubric Creation: Pitfalls

& Suggestions

- What are some pitfalls to watch out for when developing a rubric or a grading script?

- rubrics should be visible to students
- ~~should~~ cover all elements of question
- too specific or too broad
- early mistake propagate

- Grading answer vs. solution (process) / work

- private vs. public tests
- covering basic cases & edge cases
- correctness of rubric - do the question

Tips for creating rubrics

- Use positive grading, NOT negative grading.
 - Gradescope defaults to negative!

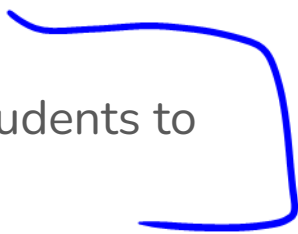
Tips for creating rubrics

- Use positive grading, NOT negative grading.
 - Gradescope defaults to negative!
- Break down the solution into major “milestones” or sections.

Tips for creating rubrics

- Use positive grading, NOT negative grading.
 - Gradescope defaults to negative!
- Break down the solution into major “milestones” or sections.
- Before finalizing your rubric, skim the first ~20 submissions of the assignment. Then, create your rubric, and then try it on those first ~20 submissions to see if it actually works.

Tips for creating rubrics

- Use positive grading, NOT negative grading.
 - Gradescope defaults to negative!
 - Break down the solution into major “milestones” or sections.
 - Before finalizing your rubric, skim the first ~20 submissions of the assignment. Then, create your rubric, and then try it on those first ~20 submissions to see if it actually works.
 - The first rubric item should mention the correct answer.
 - Generally, the rubrics should be informative enough for students to understand **why** they lost points.
- 

Tips for creating rubrics

- Use positive grading, NOT negative grading.
 - Gradescope defaults to negative!
- Break down the solution into major “milestones” or sections.
- Before finalizing your rubric, skim the first ~20 submissions of the assignment. Then, create your rubric, and then try it on those first ~20 submissions to see if it actually works.
- The first rubric item should mention the correct answer.
 - Generally, the rubrics should be informative enough for students to understand **why** they lost points.
- When in doubt, check with the instructor – it’s better to check while grading than it is to have to regrade 200+ submissions after grading.

Gradescope shortcuts

See [here](#).

The screenshot displays the Gradescope interface for a question titled "Q1. Calculus". The main content area shows the question text "Q1.1 [3pt] What is the integral of x^2 ?" and a handwritten answer x^2 . The interface includes a top navigation bar with "Full Page" and "Question Only" tabs, and a right sidebar with question navigation controls. Overlaid keyboard shortcuts include:

- J**: Previous Page
- K**: Next Page
- Shift + R**: Rotate
- F**: Zoom Out
- G**: Zoom In
- A**: Submissions Index
- .**: Next Question
- ,**: Previous Question
- 0**: Select Rubric Item
- 9**: Select Rubric Item
- Previous Submission**: Previous Submission
- Next Submission**: Next Submission
- Next Ungraded Submission**: Next Ungraded Submission
- Z**: Next Ungraded Submission

The bottom status bar shows "Submission: 5 of 20".

Gradescope answer grouping

See [here](#).



Sample rubrics

1 +2.0

Correct: `np.percentile(boot_estimates, 14)`

Also accept: `np.percentile(boot_estimates, 0.14)`

Also accept: reversing the order of the arguments

2 +1.0

Partial: used `np.percentile` with `boot_estimates`

3 +1.0

Partial: used `14` or `0.14` in `np.percentile`

4 +0.0

Incorrect or omitted

1 +4.0

Correct proof

(refer to solutions)

2 +1.0

Correctly use definition of minimizer

3 +1.0

Correctly applied multiplication property of inequalities with constant c

4 +1.0

Reversed the inequality sign

5 +1.0

Raised both sides as powers of e

6 +0.0

Incorrect or omitted

Handling regrade requests

Can reuse
Comments]

- What is the process in your educational team for handling regrade requests?
- Why would a student request a regrade? How should you handle it?

[graded wrong]
desperate for points
→ code didn't compile
[feedback wasn't
good enough]

Formative vs. summative assessments

- Grading and rubrics should always be considered in the context of the assignment's purpose.

Formative

Help students to learn and practice

When

Throughout the course

Why

Identify gaps and improve learning

How

Via approaches that support specific student needs

Summative

Assess student performance

When

At the end of the instructional period

Why

Collect evidence of student knowledge, skill or proficiency

How

Via exit learning products or a cumulative assessment

public test

Exam grading

- How is exam grading different from assignment grading?
 - more specific / a little harsher
 - final exam: far less comments
 - snacks (focused period)