

GRADING: THE FIRST HOUR.



SECOND HOUR



SIXTH HOUR



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HOOR 20



Grading in Quantitative Courses and the Sciences



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(Adapted from 2012 Becky Matz Presentation)

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GSI Teaching Orientation
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Agenda

- Policies related to grading
 - Course policies
 - Academic integrity and honor codes
 - FERPA
- How to grade
 - Developing and using rubrics
 - Tips for grading
 - Giving feedback to students
- Conclusion
 - Time for open discussion
 - Evaluation of session



Disclaimer!

- **ALWAYS** align grading policies with the lead instructor!
- **Mostly ALWAYS verify any personal policies with the lead instructor!**



Policies related to grading



Course policies
Academic integrity and honor codes
FERPA

Course Policies

- These policies should be addressed in the course syllabus:
 - How the final grade is determined
 - How partial credit is allocated
 - If makeovers or rewrites are allowed
 - If low grades will be dropped
 - If optional assignments will be provided for extra credit
 - How students should formally request regrades, if allowed
- Establishment of course policies at the onset of the semester will make your life (as a grader) easier!
- Note: You can make your own syllabus



Academic Integrity and Honor Codes

- Most schools/colleges have their own honor code
- What are some examples of academic misconduct?
- What do you do when you suspect someone is cheating?
 - Check the syllabus for the course policy
 - **Attempt to resolve the issue *with the faculty member***
 - The Dean addresses escalated issues of misconduct



When is a Student Committing Academic Dishonesty?

Activity

Analyze the situations in your resource packet and determine if a case of academic dishonesty is present and what should be done.



FERPA

- FERPA = Family Education Rights and Privacy Act
 - A federal law
 - Gives students access to their educational records
 - Lets students request changes to records
 - Protects student records from access by others
- Why does FERPA matter to a GSI?
 - Requires that you not disclose information about a student to
 - another student
 - someone outside the university (e.g., parent)
 - Requires that you not disclose grades via email
 - Requires that you not post grades by name, UMID#, etc.



How to grade



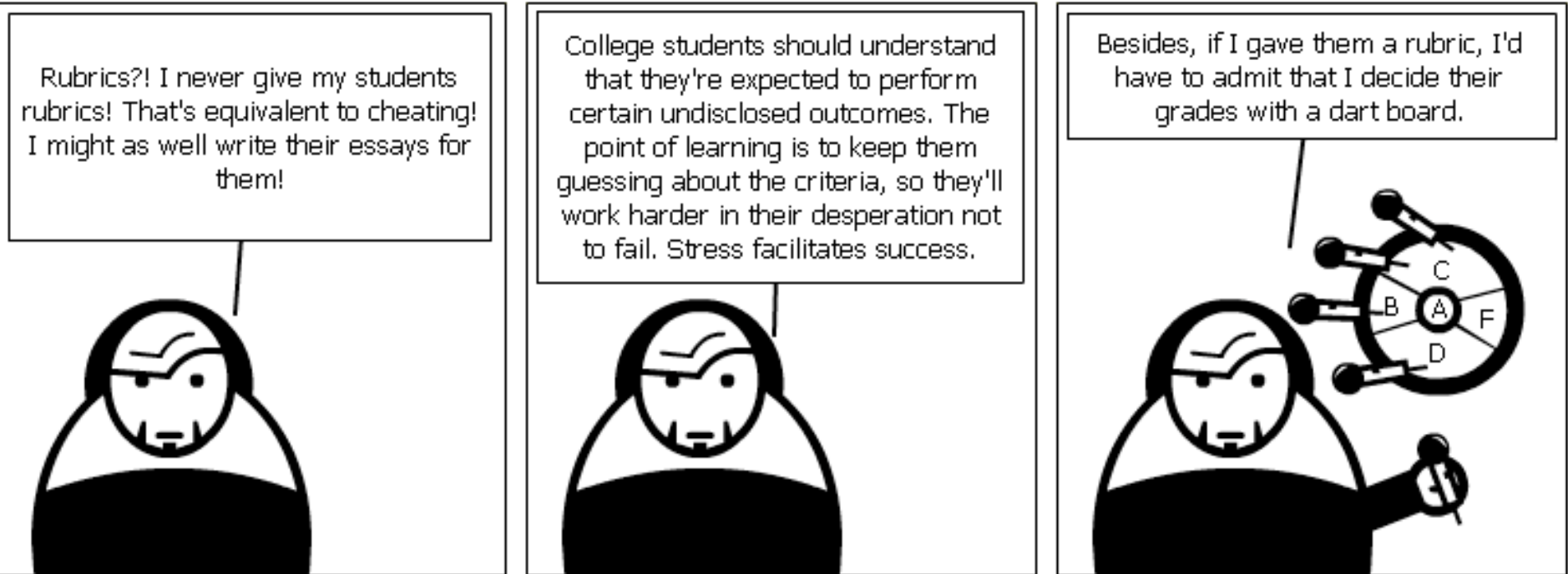
Developing and using rubrics

Tips for grading

Giving feedback to students

Rubrics

Rubrics & the Secret to Grading



What Kind of Rubric Is Required?

Activity

1. Identify the types of questions given
2. Determine the type of rubric required



Developing a Rubric

- Consider assigning points/problem or pass/fail
- Each problem is labeled with the number of points it's worth
- Work worthy of partial credit is identified
- Detail points given for partial credit
- For some problems, providing an answer box (where students need to put their final answer) would be helpful
- Have a policy for answers with blank work



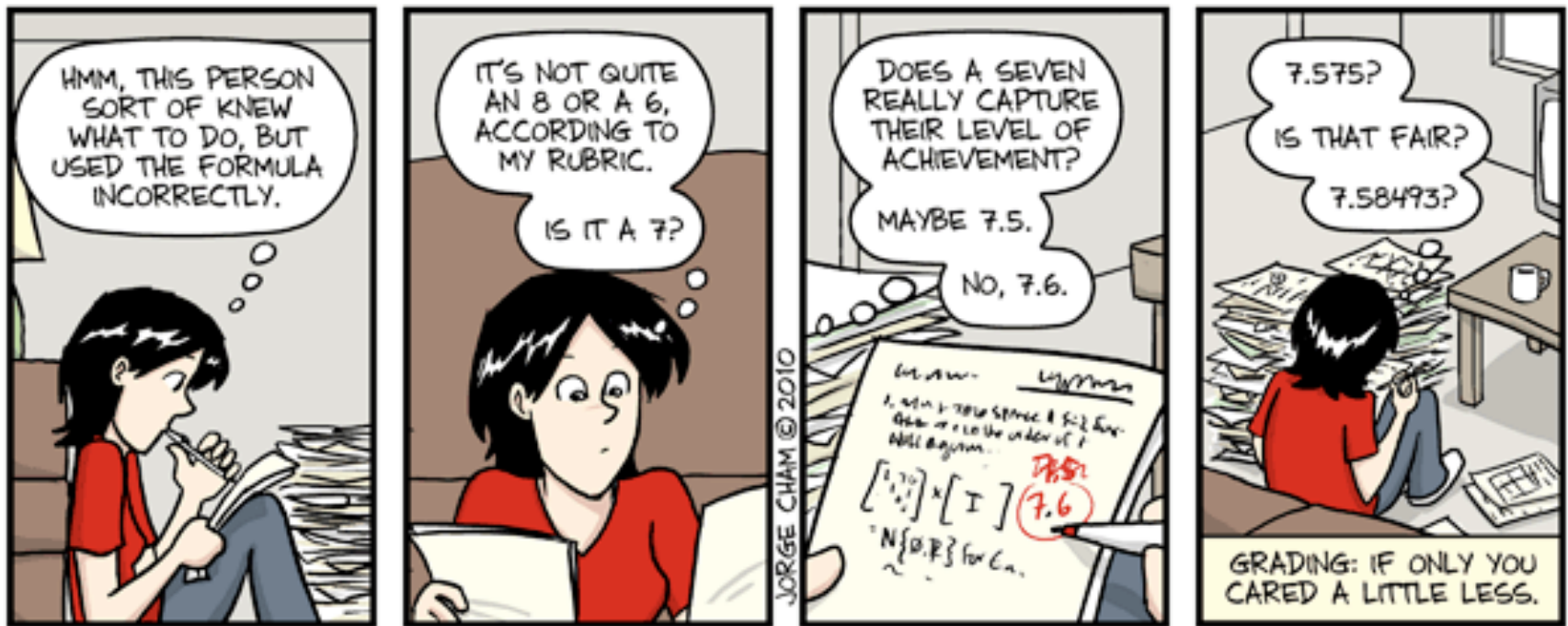
Is The Rubric Sufficient?

Activity

1. Analyze the rubric for each problem given. Determine if it is sufficient to grade the problem.
2. If it is not sufficient, what is missing?
3. Fix the rubric.



Using a Rubric



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Before You Start Grading...

- Read some of your answers
 - Observe common mistakes
 - Find “good” reports and “bad” reports
- Develop more detailed rubrics
 - Spelling?
 - Absorbance vs. absorbency?
 - Not using key terms but getting the concept
 - Missing units
- Keep in mind learning goals!



Tips for Grading

- Keep track of why you are making deductions while grading, e.g.

Nitrate Lab Grading NO_3^-
Purpose and Hypothesis (8 pts max)

- 1 well water is contaminated due to high levels of nitrate in the **septic tank**
- 1 no hypothesis about whether the nitrate level is above or below the MCL
- 1 no hypothesis about the source of pollution
- 1 saying the MCL of nitrate is 10 ppm (10 ppm is the MCL of nitrogen)

- 2 nitrate level being tested in the **septic tank**
- 2 chloride being tested in the well water or aquifer
- 2 no reason given for testing the chloride concentration
- 2 assuming that the reader knows that the water is already contaminated

- 3 not referring to nitrate at all



Tips for Grading

- If fairness may be an issue, consider having students put their name on the backside of the last page of their assignment
- Grade one question/section/problem/page at a time
- Remember that the course instructor is available to help you!
- Grading as a group
 - Communication is key!



Tips for Grading

- If you will have a grader...
 - Get a grader as soon as possible
 - Keep the grader anonymous
 - Know your grader's schedule, email, cell #, etc.
 - Maintain communication
- Store grades securely!
- Consider how you will prioritize grading
- Consider how your research advisor prioritizes your grading responsibilities



Go Grade!

Activity

1. Grade each answer using the rubric from the previous activity.
2. Determine if your rubric was sufficient.
3. If needed, alter the rubric.



Tips for Grading Teams

- Measure individual and team performance
- Employ peer ratings
- Determine grading scheme
 - Does everybody receive the same grade?
 - Is the grade weighted with a contribution from an individual grade?
- Avoid competitive grading



Giving Feedback to Students

- Consider giving students some notes about how the class did as a whole on an assignment
 - What mistakes were common?
 - What did the class do well?
 - What are your expectations for improvements in future assignments?
- Give enough feedback that students understand their grade and how to improve



Giving Feedback to Students

Becky's General Comments For Experiment #2

Class Avg: 2.39

Characterization of
Your Compound

Comparison w/
Known Compound

Comparison w/
Friend's Compound

Melting point

Co-melt

Co-melt

DS that gives $R_f = 0.5$

Co-spot

Co-spot

IR interpretation

IR comparison

IR comparison

Solubility tests

I took off points if you left out an entire column (ex: you did not compare your unknown with a known compound). Alternatively, I took off a point if it seemed that you did not understand one of the "rows" (ex: did not interpret IRs by assigning important functional groups to peaks).

Overall, most did quite well, and everybody guessed the identity of their compound correctly!



Miscellaneous Tips

- Do the problems yourself.
- Decide if detailed grading needs to be completed
- Make sure to give positive feedback
 - Unclear vs. How does this relate to theme X?
- Pick a grading method and stick with it
 - Give credit for correct things observed
 - Take away points for things not observed or wrong ideas
- Keep in mind work of lower quality is harder to grade than high quality work



Miscellaneous Tips

- Grade in a good mood!
- Grade with other people
- If you are struggling grading one paper, put it down and come back after grading the rest
- At the end, sort your papers into graded stacks. Briefly skim the papers to make sure roughly the same quality work gets the same grade.
- Consistency is key! Do what you have to do to maintain consistency



Conclusion



Time for open discussion
Evaluation of session

Open Discussion

What questions do you still have about grading?



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Evaluation of Session



