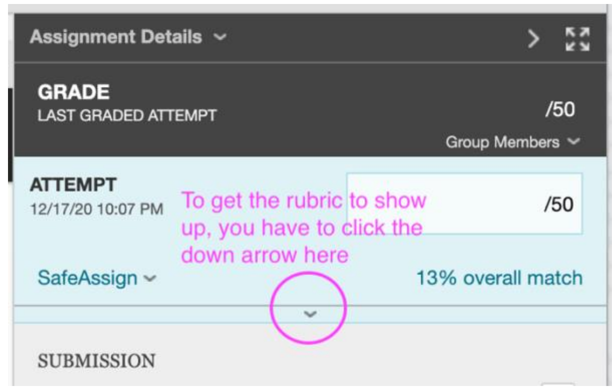
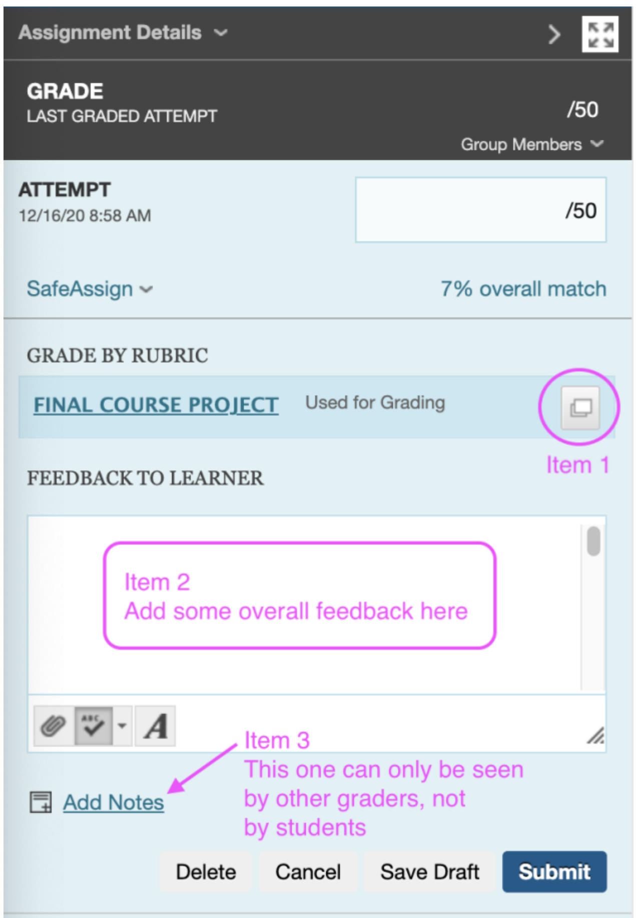
Instructions for grading the final course project in CHEM 116

The students are working in pairs which are numbered teams (with a few exceptions, Teams #85, 86, and 87 are individuals who I do not think will do the project because I learned they are withdrawing from the course). When you click on "Needs Grading" in the left navigation, and forward to the end, you will see team numbers and their project submissions. There is one project report for both students on the team. Both students should receive the same score.

When you open the project report to be graded, you will find a screen with assignment details on the right side. To get the rubric option to show up, you have to click the down arrow (see pic at right).



Then you will see a view that looks like this:



Overall instructions

- Click on Item 1 so that you grade by rubric.
- After you finish grading by rubric, please add a brief overall comment in the space labeled Item 2.
- You can ignore Item 3.
- When you are done, make sure that the "Attempt" shows the score out of 50 points that you assigned in the rubric. Then click "Submit".

(see next page for instructions on grading by rubric)

Grading by rubric

When you open the rubric, there will be places to enter information. I only made rubric descriptions for 0, 5, and 10 out of 10 points for each category. Very likely, you will be giving points that are in between 5 and 10 points. To do this, select the middle item and then in the comment, write how many points out of 10 you gave (you will override the rubric at the bottom). Here is an example of what that looks like:

Help

Name: **Final course project**

Exit Save

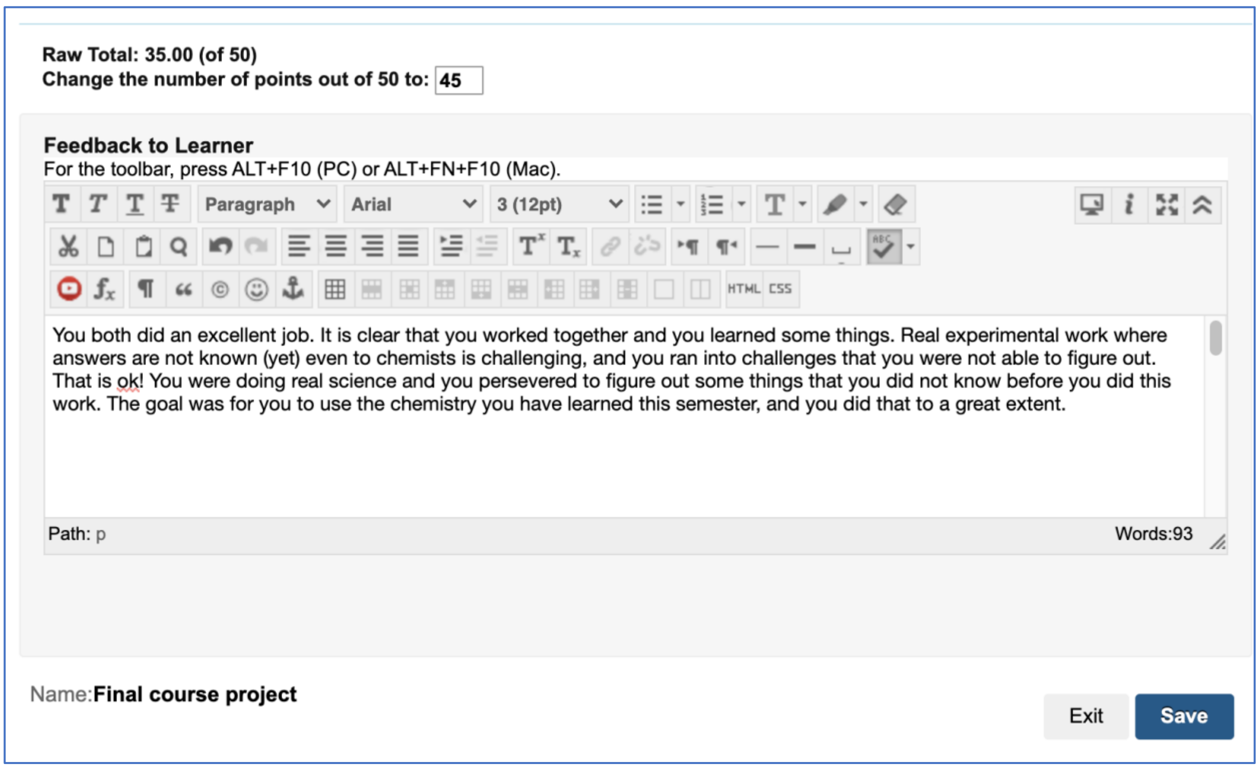
Grid View List View

	Novice	Competent	Proficient
Experimental work	Points: 0 (0.00%) No photos, no evidence that the expected experimental work was done by both individuals	Points: 5 (10.00%) Evidence that some of the experimental work was done, or evidence limited to showing that all of it was done by one person and no experimental work was done by the other person	Points: 10 (20.00%) Photos demonstrating that all aspects of the expected experimental work were carried out and that both individuals participated Feedback: 10 out of 10. Nice experimental work by both of you.
Mathematical work	Points: 0 (0.00%) No attempt to do mathematical work	Points: 5 (10.00%) Mathematical work attempted but parts are incorrect Feedback: 8 out of 10. You used the Nernst equation to show 1.5 V, but didn't say where you got the reduction potentials from.	Points: 10 (20.00%) Correct usage of the mathematical models related to the project
Conceptual work	Points: 0 (0.00%) No explanations given for the chemistry that the project instructions specify should be explained	Points: 5 (10.00%) Attempt is made to provide explanations that have relevance, but explanations are unclear, inaccurate, or use chemistry vocabulary that does not make sense Feedback: 8 out of 10. You labeled only half of the items (you were supposed completely map both diagrams to each other).	Points: 10 (20.00%) Accurate, clear, and logical explanations of chemical ideas (either acid-base or redox) with correct usage of chemical terminology (e.g., conjugate acid/base, pH, oxidation numbers, anode & cathode)
Application work	Points: 0 (0.00%) Report is absent any mechanisms and/or causal explanations based on kinetic or thermodynamic reasoning	Points: 5 (10.00%) Kinetics or thermodynamics are invoked but in part are misapplied in reasoning about how to control and/or optimize the chemical system Feedback: 9 out of 10. Increasing T will make the forward and reverse rates faster so battery gets to equilibrium (dead) sooner. Also deltaH is negative (exothermic). But T behavior depends on deltaS sign not deltaH.	Points: 10 (20.00%) Appropriate application of chemistry models to explain how (mechanism) and/or why (causal explanation) the behavior or function of a chemical system can be controlled and/or optimized

This is a final project where students are using chemistry they have learned. Pay attention to what they are demonstrating that they learned more than the chemistry they got wrong. Celebrate what students did well, and only take off minimal points for what they did incorrectly (refer to the student handout for specific expectations). In most cases, there will be many things that are incorrect. Pick the one most basic idea that is incorrect and comment on that, so that there can be something learned by the students, and then mostly ignore the rest of what's incorrect. The students are doing real experimental science and, just like you do in your research, it takes a lot of work to figure out if something makes sense. There will also be some things that you won't know how to figure out if they are correct or incorrect. These students are taking a first-year undergraduate course in chemistry, they not in graduate school and they had a very limited time to do these experiments, and they did them at home in their kitchens, not in a lab with equipment, so just ignore things where you have no idea what the students are talking about. Most of what you should be doing is to look for things that they did correctly.

At the bottom of the rubric, leave an overall comment on the rubric. It is fine if you use something similar to what I wrote in the example below, or your own version of it, for most of the students.

Be sure to override the total score (change the number of points) so that it reflects the actual total that you are giving the students. I expect that the vast majority of projects will receive a score somewhere between 40 and 50.

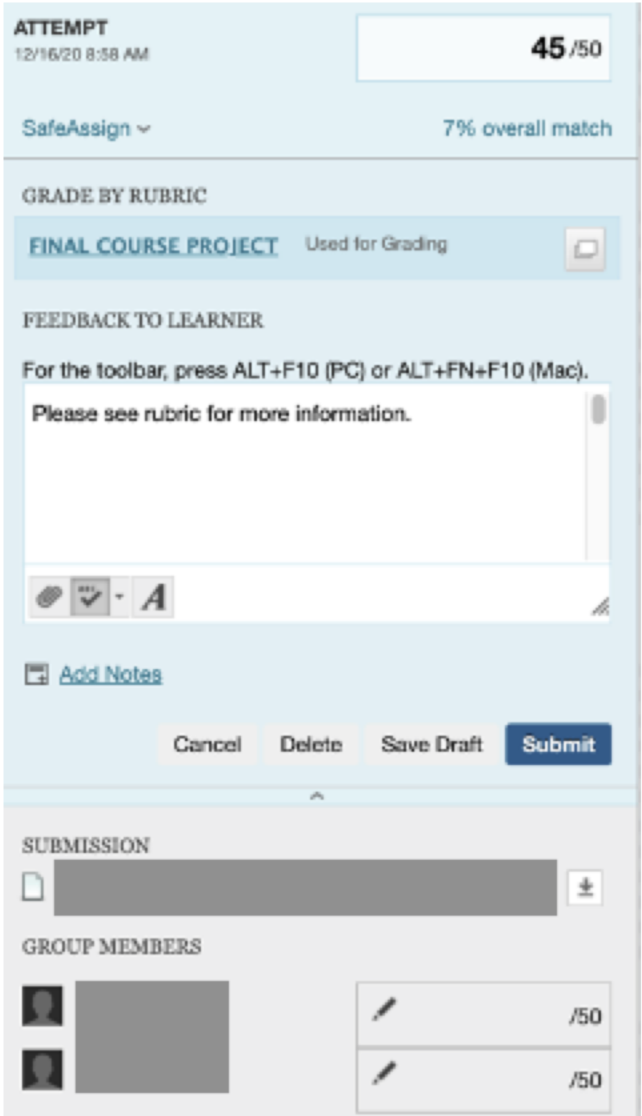


Do check the SafeAssign score. If you see something that looks very high, please alert me. Also alert me if you read a report where it is clearly indicated that only one student in the pair did the work. I will grade these situations.

The score you give in the rubric will automatically populate to both students in the team. Do not fill in the "Group members" section at the end because that overrides the score you gave. On the next page is what the screen looked like when I returned after saving the rubric and before I submitted.

In the section on "Feedback to learner", I directed students to look at the rubric, since they will need to click on the rubric in Blackboard in order to see their scores and the feedback, and they might not know to do that.

Afterward, click "Submit" and the grade should then go to the students.


ATTEMPT
12/16/20 8:58 AM
45 /50
SafeAssign
7% overall match
GRADE BY RUBRIC
FINAL COURSE PROJECT
Used for Grading
FEEDBACK TO LEARNER
For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).
Please see rubric for more information.
Add Notes
Cancel
Delete
Save Draft
Submit
SUBMISSION
GROUP MEMBERS
/50
/50