Here we explain some tips designed to help you learn as much as possible from the Exam Prep (EP) assignments this semester and to help you demonstrate that learning on tests and exams.

For any work submitted for grading in this class, you must explain your methods and your calculations in full detail so that the grader can give meaningful feedback and identify any conceptual or technical errors that may be causing you confusion. This level of detail will make your work on the homework and EP assignments more useful to you as a study tool for exams.

Examples discussed in class or in the textbook give a good model for the kinds of explanations and details that are required in order to receive full credit for your work. (It may be helpful to imagine that you are explaining the problem to a friend in the class who has come to you for help.) You are encouraged to discuss homework problems and EP problems with other students or in office hours with an instructor. Note that calculators and other computational technology are not suitable substitutes for conceptual explanations of your work on a problem.

Some textbook problems are very simple, and are designed to check that you can carry out a routine task. Other textbook problems are more conceptual and require independent thought and creativity. Generally, exam and exam prep problems are quite complex and require executive problem-solving skills such as choosing a relevant method, organizing a complex series of steps, or combining multiple ideas from multiple sections of the textbook. Other problems involve some creativity, as in constructing an example that satisfies multiple conditions or explaining why no such example is possible.

Submissions with identical or near-identical solutions for these more complex problems, or submissions where calculations lack the expected supporting details, will be graded on a shared credit basis. That is, half the points earned on a test, exam or EP assignment with any of these features will be recorded as the submitting student's score on that assignment or exam. The remaining points will be attributed to contributions of collaborators or to calculators/computational technology.

- See pg. 2 for guidelines to help you avoid accidentally invoking the shared credit grading option by turning in work that is incomplete or too similar to that of your friends.
- Submissions flagged by the graders as candidates for shared credit grading will be reviewed carefully by the instructional staff.
- If you have concerns that your submitted work has been misunderstood, then you should contact the course head right away to discuss it further.
- If that discussion does not resolve the issue, you may request an oral exam to demonstrate your independent knowledge of the material.
Exam Prep (EP) Assignments

You will derive the most benefit from the Exam Prep problems and avoid accidentally invoking the shared-credit grading option if you follow some simple guidelines. **When you discuss EP problems with other students or with an instructor, focus on the conceptual questions. Don't work through all the details together.** Comparing final answers to check your work is useful, and can spark a good discussion, but work through the details independently.

If possible, take a break before you write up your solution in final form. Put away your notes and start afresh after allowing the ideas to settle and gel in your own mind. Again, **work on your own, write out all the steps and explain your reasoning. Include all the details of any calculations. A step-by-step explanation of your analytic methods and supporting work should accompany any graphs that are included in your submitted work.**

In general, the more work you show, the better. **The shared-credit grading option does not apply to the first EP.** In fact, if you are in a group that works together closely, we encourage you to discuss your first EP with your instructor to see whether there are potential problems.

Tests & the Final Exam

Most students will experience some time pressure on the tests and the final exam. Preparing for these exams involves digesting and consolidating the ideas you have been learning and practicing in the homework and EP assignments so that you can quickly determine a good approach and carry out the needed analysis efficiently, without hesitation. **The less you refer back to notes and the textbook when you do your final write-up of the EP problems, the better they will prepare you for the tests.**

To help you with this consolidation of ideas, **you will be asked to prepare a summary reference sheet for each test, which you must submit before you start the exam.** You are encouraged to prepare these summaries together, and please note on them the names of others who worked with you. Pay attention to the ideas that are emphasized in the EPs and use them to prepare your summary of the important formulas and definitions that you might need on the exam. **One handwritten sheet of paper should be ample for this, maybe two sheets for the final.** The more you can distill your summary to the essential items, the more useful it will be to you as a reference on exams. You might also use the textbook to quickly refresh your memory during the test, but having a well-designed summary sheet will be more efficient.

- Use of other books, notes (other than your submitted reference sheet), internet etc. is not allowed during the exams.
- Collaboration with others not enrolled in the class this semester is not allowed during the exams.
- Submissions containing collaborative work or calculator/computational technology use will be graded using the shared credit system.