

## INFORMATION FOR STUDENTS IN MATH 125A/B WINTER QUARTER 2019

NOTE: Much more information on Math 125 can be found at the course website

<http://www.math.washington.edu/~m125>

Calculus is a challenging course for several reasons. First of all, we have to cover a large number of topics and problem-solving techniques in a relatively short period of time. A 10-week quarter has 30 lecture classes (compared to 180 days in a high-school year). This means that lectures cannot cover every detail of every type of problem, and much of the learning takes place through worksheets (the group work in your Tuesday/Thursday sections), homework, studying your notes and textbook examples, and doing practice exams.

In the second place, we expect active mastery, not just passive understanding. Passive understanding of how to solve a problem means that the solution makes sense to you when someone else does it or shows you how to do it. Active mastery means that you can do it yourself in an exam situation.

In the third place, we emphasize story problems. Being able to do story problems requires a greater depth of understanding than just being able to solve routine pure-math problems. All of the story problems on exams can, of course, be solved using the techniques you have learned. However, at first glance a problem may seem unfamiliar because of the language used to describe the practical scenario. So you have to be able to recognize how to translate the everyday language into the language of mathematics and then use the appropriate math technique.

**MON/WED/FRI LECTURES:** Please come on time to all lectures. Entering the lecture room late is disruptive and distracting to other students, and it often means that you will be unable to follow the discussion (such as the solution of a sample problem) that is already in progress. When time in lectures or sections is devoted to a problem, that is a good hint as to the types of problems that are likely to occur on midterms.

You are responsible for any information or announcements made during lectures or sections. If you are absent for any reason, it is up to you to obtain detailed information about what you missed from a classmate, for example by photocopying the classmate's lecture notes and having him/her explain them to you.

**TUES/THURS SECTIONS:** The 50-minute discussion/presentation section on Tuesday and the 80-minute worksheet section on Thursday are an integral part of the course. The worksheet/discussion/presentation problems are often longer and more challenging than routine webassign problems. They are designed to help you get a deeper understanding of the concepts, techniques, and applications of calculus.

Students are expected to work in groups on the worksheets, and to contribute to their group. The worksheets are **not** to be handed in. However, your T.A. will monitor and spot-check your work, and will evaluate the group work as part of the section grade.

During the quarter each student is expected to do one presentation of a solution to a challenging worksheet/discussion problem. Being able to clearly explain your work in an oral presentation is an important skill in many scientific and technical jobs. The quality of your presentation, along with your group work on Thursdays and your participation in class discussions of the problems, will form part of your section grade.

The midterms will be given in section on January 31 and February 28.

**GOOD EXAM-TAKING STRATEGY:** (1) First solve the problems that you are confident about (these are not necessarily the first ones and they are not necessarily the same ones for all students), taking your time, checking your work as you go along, and avoiding careless mistakes. When you are sure of those solutions, then proceed to the problems you find more difficult. (2) Read a problem carefully and think about it before starting work. Usually there is no partial credit if a problem is set up wrong, or if the initial stages in solving the problem are incorrect. (3) Show your work clearly and legibly. (4) If any of your work is out of sequence, show by arrows the order in which your solution needs to be read. (5) Box your final answers. (8) Don't leave an exam early unless you have carefully checked all your work.

**GRADING:** 20% first midterm, 20% second midterm, 40% final exam, 5% webassign homework, 15% section grade.

Conversion from points out of 100 to a grade: 90 or more is a 4.0, 70=3.0, 50=2.0, 30=1.0, etc.

According to Math Department policy, the median final course grade in each lecture section must be between 2.7 and 3.1. This means that if an instructor initially grades the class and gets a median of 2.6, he/she

must curve up everyone's grade by an average of 0.1. If the initial median is 3.2, then he/she must curve down the grades by an average of 0.1. In past quarters the median course grades in my Math 124 and Math 125 sections have almost always fallen in the 2.7–3.1 range without curving, so no adjustment has been necessary.

**TAKING A MIDTERM EARLY:** If you anticipate a conflict with a midterm, please arrange to take it a day or two early during your T.A.'s or my office hours. Under no circumstances will a test be given late. This is because we make answers available and encourage students to talk about the test right after it's over.

**MISSED EXAM:** No excuses will be accepted for a missed midterm, with one exception. If you have a documented medical emergency or illness,\* then you will be excused from the test. This means that your grade will be computed on the basis of the other components of the grade, as if the missed one didn't exist. We cannot accept undocumented medical excuses; nor are we in a position to evaluate or make judgments about whether or not other types of excuses are valid, so we cannot accept them.

In the case of the final exam, if you have a conflict you may petition the Math Advising office to let you take the make-up final exam, which is given 4 days later (the Wednesday of exam week). They only accept extremely compelling reasons, such as a religious objection to taking an exam on a Saturday. If you have a documented medical emergency that prevents you from taking the exam, then on the basis of that documentation the Math Advising office will arrange for you to take the make-up exam, assuming that you are medically able to by that time. If not, you should ask me to give you a grade of Incomplete (which basically means that you have to take the final exam next quarter).

**CALCULATOR POLICY:** No calculator may be used on a midterm. On the final exam the TI30X-IIS calculator may be used, but no other

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\* For this we need a signed note from your doctor with a phone number for verification. The note need not contain any medical details (which would violate medical privacy anyway), but needs to state that you were medically unable to be in class on the specified day(s). The note must be from a doctor, not from a counselor, patient advocate, parent, personal trainer, etc.

one. Please also be sure that the only calculator you use in this course when doing the worksheets is the IIS model (2-line display) of the TI30X, that is, the same one that will be permitted on the final exam. The use of a cellphone or any other electronic device on an exam (except for the TI30X-IIS calculator on the final exam) is forbidden.

**ONE-PAGE SHEET:** On both midterms and the final exam you may use a sheet of notes in your own writing (not downloaded or photocopied). The sheet can be 8 1/2 X 11 inches, and can be two-sided.

**DICTIONARY:** If your native language is not English, you may bring to any exam a (hard copy) dictionary between English and your own language. Please first show your T.A. the dictionary you will be using.

**CHEATING:** Any talking to a friend, looking on another student's paper, or use of a cellphone (or any other unauthorized device) during an exam constitutes cheating.

If you observe any instance of cheating, please report it to me or your T.A. immediately with as many details as possible so that I can take appropriate action. It is unfair to honest students to allow anyone to get a higher grade by cheating.

**CHEATING ON HOMEWORK:** Someone who gets answers from a friend or from an online source is likely to be totally unprepared for the exams, and so will do very poorly on them. Since exams count 80% of the grade (and webassign counts only 5%), the poor exam performance will be sufficient punishment for cheating on homework. Thus, if you observe cheating on the homework, there is no need to report it to us, since in that case we don't take any disciplinary action.