Honors 2202-2 Calculus for Students in Non-Technical Majors Part II

Course Meets:
   TWHF 10:45-11:35AM  JTB 120
Text:
   Calculus: Modeling and Application by Smith and Moore
   Course Lecture Notes - to be handed out as appropriate

Instructor: Nancy Sundell-Turner
Office: LCB 333
E-mail: sundell@math.utah.edu
Phone: 585-1637
Web Page: www.math.utah.edu/~sundell

Office Hours: Office hours are times when you can come to my office and ask questions about anything related to the course (homework, exams, lectures, grades). I encourage you to take advantage of these times whenever you have questions. Some class time will be reserved to answer homework questions. However, I prefer to keep in class explanations fairly general and will only give hints to help you get started, or get over major hurdles. I will not be working through the problems in class as it is very important for everyone to spend some time thinking about the problems on their own. I am much more likely, and very willing to give detailed help and suggestions if you come to my office with your questions. In addition, if you have relatively quick questions, such as an algebra problem, feel free to talk to me before or after class.

The times listed below are times when I will definitely be in my office. If you are unable to come during the scheduled office hours and would like to meet with me, please feel free to stop by, e-mail, call, or talk to me at class to set up another time.

I will definitely be in my office, LCB 333, at the following times:
   Tuesday 9:30-10:30am
   Wednesday 11:45am-12:45pm
   Thursday 11:45am-12:45pm
   Friday 9:30-10:30am
Grades: Your overall course grade will be approximately determined by the following:

- Homework and in class group work - 50%
- Four exams - 12.5% each, 50% total

Homework: Homework will be assigned each week and will be due on Fridays at the start of class, 10:45AM (beginning Friday January 23). The one exception to this may be during exam weeks when the homework due date may be shifted by a day or two. These changes will be announced in class and listed on the web page syllabus (mentioned below). No late homework will be accepted except under unusual circumstances. I reserve the right to determine whether or not you have a valid excuse. If you are ill and must miss class on the day homework is due, send me an email, call or have a friend send an email or call to let me know. If you know that you will miss class on the day the homework is due, you must make arrangements with me AHEAD OF TIME to hand the assignment in early.

Each homework will be graded out of 20 points based on the content of your answers and clarity of your explanations. If a problem asks for an explanation of your work, I expect your answer to be written in complete and grammatically correct English sentences. An often underdeveloped skill in mathematics (and other fields) is the ability to clearly explain one’s reasoning and logic. The process of writing mathematics in words is often a good way to discover aspects of a problem that you may not fully understand, and need to look over again in more detail.

If you fail to write out your answers neatly, such that it is difficult for me to follow your work, I reserve the right to give no credit for that portion of the assignment. Please label the problems, write legibly and leave space between problems. Do not try to see how many answers you can cram onto one side of a piece of paper.

It is in your best interest to work on all the problems and ask for help on those that you cannot figure out on your own. I will take time at the beginning of class on Thursdays (the day before the homework is due) to answer questions for the assignment due on Friday. However, questions are welcome anytime. You may work together on the assignments, but you must turn in your own work to get credit. Throughout the semester, there will be in class group work which I will ask you to write up on your own and hand in with the other assigned problems for that week.

Notice that homework comprises 50% of your overall score for the course. There will be 13 assignments, so each one is worth almost 4% of your final grade. Therefore, it is very
important that you complete all of the assignments to the best of your ability. I highly encourage you to work together and take advantage of my office hours. Notice that I have office hours from 9:30-10:30 on Friday mornings for last minute homework questions. I will not take homework questions in class on the day the assignment is due.

**Exams:** There will be four exams during the semester all on Wednesdays: February 11, March 10, April 7, and April 28. The Tuesday class period before each exam will be used for review problems and student questions. Each exam will be worth 12.5% of your overall grade (equivalent to 3.25 homework assignments). The main focus of the exams will be on general concepts as opposed to complicated algebra and other computations. (Computational skills will be required for homework problems.) That is not to say that there will be no computations on the exams, but rather don’t let yourself panic too much over algebra problems you may be having. The exams will not be cumulative, unless a later topic builds upon an earlier one (as is often the case in mathematics). There will be no final exam. If you have a conflict with any of these exams, please let me know at least one week before the exam date. A missed exam cannot be made up unless there is a medical/family emergency.

**Calculators:** I will not be requiring you to buy any particular type of calculator for this course. Graphing calculators will be useful for many of the homework assignments, and in class problems. If you have one, feel free to use it in these instances. However, in general you will not be allowed to use calculators on the exams, so don’t become too dependent on them. If a problem requires some basic algebra, try working it out by hand, before reverting to your calculator. I think you will be pleasantly surprised to discover how much you are capable of doing on your own if you give yourself a chance. Plus, calculators and computers sometimes give incorrect answers, and it is important to be able to recognize these instances.

**Background and Material Covered:** This is the second semester of calculus, so I am assuming that you’ve all taken at least a one semester calculus course in the past. As most first semester classes focus on derivatives and their applications, I am assuming that you know what a derivative is, how to calculate one, and what its uses are. We will briefly review the basics of derivatives and introduce a few concepts that may or may not be new before moving on to integration, which will be the focus of the course. If you are not feeling comfortable with the review material, please come and see me soon, so that you can get caught up before we move on to other topics.

After briefly discussing some sections from chapters 4 and 6, we will roughly cover chapters 8-10 of the text book, with additional material added to supplement the text. Most of the time, I will hand out notes in class for the supplemental material. These notes, any other
handouts, and an ongoing course syllabus will be available on the course web page:

www.math.utah.edu/~sundell/honors2202sp04.html

This will list the topics being covered as well as the current homework assignments, and solutions to selected problems. Please check this web page frequently, especially if you miss class. The syllabus will be updated during the semester, as we may spend more or less time on the given topics depending on the interest and understanding of the class.

**Mathematics Tutoring Center:** The Mathematics Tutoring Center (located in the basement between the two math buildings (JWB and LCB)) offers free, drop-in tutoring. The tutoring center hours are: 8am-8pm Monday-Thursday and 8am-6pm on Friday. The center is closed on weekends and University holidays. There is an area next to the tutoring center with lots of tables for group study. Feel free to take advantage of this as a place to meet to work on the homework or study for exams.

**Final Thoughts:** I would like for this to be an enjoyable class for all of you as well as for myself. Therefore, any comments, suggestions or requests that you have are always welcome. Feel free to e-mail, come talk to me, or voice your opinions anonymously. If there are particular topics or mathematical concepts that you would like to learn more about, mention them to me, and I'll try to fit them in during the semester.