# Calculus 3 - Math 250 - Spring 2020 

TTh 2:30-3:50, W 3:35-4:30 in SH 212<br>TTh 4:00-5:20, W 4:40-5:35 in SH 212<br>Dr. Diane Hoffoss, Serra 145, x7781, dhoffoss@sandiego.edu<br>Office Hours: T 1:25-2:25, T 6:30-7:30, W 1:25-2:25, W 5:40-6:40, Th 1:25-2:25<br>Math Center Calc 3 Tutor: Dates \& Times TBA

## Supplies

Text:
Essential Calculus with Early Transcendentals, 1E by Stewart.

## Calculator:

You will only need a basic calculator, and only for some of the homework problems in this course. You will not need and will not be able to use a calculator on the exams.
Stapler:
A stapler is required. Any assignment longer than one page that you hand in must be stapled together.
Loose bundles of paper will not be accepted.

## Earning Points

You can earn points in this class in the following ways:

| Professional Conduct |  | 5\% |
| :---: | :---: | :---: |
| Homework |  | 10\% |
| Exam 1, Feb 25 |  | 20\% |
| Exam 2, Mar 31 |  | 20\% |
| Exam 3, Apr 28 |  | 20\% |
| Exam 4, May 19 @ 2-4 or May 21 @ 11-1 |  | 25\% |

All assessment will be based on a judgment of your ability to solve problems, to make valid arguments, and to communicate and explain your reasoning.

## Grading Scale

The grading scale below will determine your final grade.

| $97-100=\mathrm{A}+$ | $87-89=\mathrm{B}+$ | $77-79=\mathrm{C}+$ | $62-64=\mathrm{D}+$ |
| :--- | :--- | :--- | :--- |
| $93-96=\mathrm{A}$ | $83-86=\mathrm{B}$ | $68-76=\mathrm{C}$ | $53-61=\mathrm{D}$ |
| $90-92=\mathrm{A}-$ | $80-82=\mathrm{B}-$ | $65-67=\mathrm{C}-$ | $50-52=\mathrm{D}-$ |

Note: Laughing at the professor's jokes can only improve your grade.

## Time Expectations - WARNING!

With any 4 unit college course, you should expect to spend a minimum of 8 hours per week outside of lecture on work for the class. This course will be an exception! Calc 3 has about $50 \%$ more content than Calc 2 did, so this means you will need to put in about $50 \%$ more time than you did for your Calc 2 course. Therefore you might need to invest 12 hours per week - more than that if your preparation is not strong. Do not fall behind! If you find yourself lost or confused please come see me at once so that you can get back on track.

Exams - $20 \%$ or $25 \%$ each
There will be 4 exams in the course, whose dates are written above. You can choose to take your final exam on either of the above dates. These exams are closed book, closed notes, closed friends, open brain, and under the honor system. I will not, under even the most extraordinary, amazing circumstances, give a make-up on a midterm. Please schedule your trips, illnesses, and deaths of pets to not overlap these dates.

## Professional Classroom Conduct - $5 \%$

You are expected to conduct yourselves maturely and respectfully in the classroom; I promise to do the same. Each student will begin with full credit for this portion of your grade, and I intend that each student will also end the course with full credit for this portion. However, in order to insure that the classroom atmosphere remains supportive and positive and is not poisoned by inappropriate behavior, it is possible to lose points for the following:

1. No whining allowed! This will be a difficult course and most of you will find the course challenging. We will face the challenge together with a positive attitude. Complaining about the quantity or difficulty of the work required for this course makes the course unpleasant for you and those around you, and it will not be tolerated in class.
2. Your attitude towards your fellow classmates and your professor must always be kind and respectful.
3. You should arrive to class on time and stay in the classroom until the end of class. If you will need to arrive late or leave class early, you should get my permission before class starts. Take care of any pressing personal needs you may have before coming to class; walking in and out of the classroom during lecture is disruptive and disrespectful.
4. You are expected to participate in all classwork activities, and to not distract your classmates from their classwork with non-math chit-chat.
5. If you must miss class (not advised!), you should get the notes from a friend in the class first. Take some time to copy out and study the notes. If you still have questions after this, you're welcome to come to office hours to get them cleared up.
6. Cell phones off, of course!

## Homework - 10\%

Four to six homework problems will be assigned nearly every class period, and will be due at the beginning of the next class period. I will not accept late homework under any circumstances, but I will drop your lowest homework score. Note that if you miss a class for any reason (not advised!!), you are still responsible to get your homework assignment in on time. You may give it to a friend to turn in, turn it in early, type it up or scan it and email it to me, or even fax it in (619-260-4293 - if you fax, be sure to write in PEN and not pencil), but it must arrive on time in order for you to receive credit. Unfortunately, I can't accept submissions which are photos taken from your phone - these often won't print, and when they are printed, they are often hard to read.

These written problems will be graded carefully both for correctness and for clarity of presentation this is your chance to really show off your stuff! An additional handout discusses written homework grading policies and qualities of a good homework solution write-up in some detail, and we will spend a good deal of time in class discussing this as well.

## Academic Integrity

While I encourage you to work in groups to discuss the problems in your homework, the work that you hand must be your own. This means every word and symbol that you write on the paper was your own idea, originating from your own brain, without any outside help, and without referring to notes that you have written while discussing the problems with another student. Be careful discussing problems with others that you do not fall into the habit of writing up the solutions together as well. I have instructed the grader to give a 0 to any homework assignment which has any problem solution that is is nearly identical to another student's solution, or which is nearly identical to the solution presented in the Solutions Manual. In addition, violating this policy is an Academic Integrity violation and will result in your being referred to the Honor Council.

## Learning Outcomes

- Students will demonstrate a working knowledge of multivariable calculus topics. This includes knowledge of theorems with complete assumptions.
- Students will demonstrate the ability to use methods of multivariable calculus and perform computations accurately and efficiently.
- Students will demonstrate the ability to solve problems, including applications outside of mathematics.
- Students will be able to construct elementary calculus proofs independently.
- Students will demonstrate the ability to communicate mathematical ideas clearly.

