

# Math 3302 Fall 2018

M/W/F 9:00-9:50 am or 1:00-1:50 pm, Clements Hall Room 126

**Instructor:** Dr. Claudia Castro-Castro

**Email:** ccastrocastr@smu.edu

**Office:** G21A Hyer Hall

**Office Hours:** M/W 2:30-3:30 pm, F 10-11 am, or by appointment (arrange by email)

**Homepage:** ckcastro.github.io

**Text:** *Essential Calculus Early Transcendentals*, James Stewart, 2nd edition

**TA Help Sessions:** Math department graduate students run free help sessions in Clements Hall room 225, Monday-Thursday from 4:30-7:30 pm.

## Course Description:

A continuation of MATH 1338. Includes parametric equations, polar coordinates, partial differentiation, multiple integrals, and vector analysis.

## Educational Outcomes:

- Students can sketch vectors and vector functions and compute sums, products, derivatives, and integrals of these quantities as appropriate.
- Students can compute partial derivatives and directional derivatives at a point on a surface and find maximum and minimum values.
- Students can evaluate double and triple integrals over simple 2D and 3D regions, as well as parametric line and surface integrals.
- Students can state and use the main theorems of vector calculus.

**Prerequisite:** C- or higher in MATH 1338 or 1340.

## Reading:

Reading the sections of the textbook is required, and will be necessary for completing each homework assignment. You are responsible for all of the material in the assigned reading, whether it has been presented in the lecture or not. Specific passages for each section are listed on the Reading page.

## Homework:

You will have two types of homework assignments, **warm-up problems** and **homework**:

### Warm-up Problems:

A small number of problems will be associated with every section in the book. These assignments will be very short, will cover material from your reading, and will be due on paper, in person, at the beginning of class (before the material is presented in lecture). These problems will be listed on the Reading page.

You may work on these problems with other students. If all problems are attempted, the lowest possible grade you can attain on each assignment is a 70.

*Warm-up problems may not be turned in late, and may not be turned in by email.*

**Homework:**

More typical homework assignments will be posted on the course Homework page. These will generally be due each week throughout the semester. These assignments will be due by 5:00 pm on the specified due date. These may be turned in during class or brought to my office. All homework problems must be done on your own. Late homework must be scanned to a single PDF file and turned in by email to the professor. Late homework will lose points based on the following schedule:

- 1 minute to 24 hours – 10%
- 24 hours to 48 hours – 20%
- 48 to 72 hours – 40%
- over 72 hours – no credit

**Exams:**

We will have 2 in-class exams, the dates of which are posted on the course web page. The exam questions will be based off of the reading and homework. These exams will be non-cumulative, and will be open-book/open-notes, but no calculators are allowed.

**Final exam:**

During the regularly-scheduled exam period (schedule). This will be cumulative, and will be more heavily weighted to new material. The final exam is also open-book/open-notes, with no calculators allowed.

**Make-up Policy:**

Make up for tests will be given only under *extreme* circumstances. You *must* notify me immediately if you are not able to take a test at the scheduled time.

**Grading:**

Your course grade will be determined using the following formula:

10%	Warm-up problems
20%	Homework
40%	Mid-term exams
30%	Final exam

If your final exam grade is higher than your lowest regular exam grade, then I will instead determine your grade using the formula:

10%	Warm-up problems
20%	Homework
20%	Best mid-term exam
50%	Final exam

All final grades are assigned on a standard grading scale.

## **Honor Code:**

The SMU Honor Code applies to all homework and exams in this course. Work submitted for evaluation must represent your own individual effort. Any giving or receiving of aid without my express consent on academic work submitted for evaluation shall constitute a breach of the SMU Honor Code. \\

I take honor code violations very seriously, and will report all violations to the SMU Honor Council. The minimum penalty for a violation is a “0” on the assignment (will not be dropped), and the maximum penalty is immediate failure of the course. These penalties are in addition to those imposed by the SMU Honor Council.\\

A generally applicable rule of thumb in this course is: you are encouraged to talk about general problem strategy, or to discuss specific details about non-assigned problems. However, you should not look at another student’s homework, or discuss their homework in sufficient detail for you to turn in something that you could not recreate entirely on your own. See the SMU Honor Code website for more information.

## **Disability Accommodations:**

Students needing academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call 214-768-1470 or visit <http://www.smu.edu/Provost/ALEC/DASS> to begin the process. Once registered, students should then schedule an appointment with the professor as early in the semester as possible, present a DASS Accommodation Letter, and make appropriate arrangements. Please note that accommodations are not retroactive and require advance notice to implement.

## **Religious Observance:**

Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

## **Excused Absences for University Extracurricular Activities:**

Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue)

## **“Campus Carry” Law:**

In accordance with Texas Senate Bill 11, also known as the “campus carry” law, following consultation with entire University community SMU determined to remain a weapons-free campus. Specifically, SMU prohibits possession of weapons (either openly or in a concealed manner) on campus. For more information, please see: [http://www.smu.edu/BusinessFinance/Police/Weapons\\_Policy](http://www.smu.edu/BusinessFinance/Police/Weapons_Policy)