Syllabus Math 20C Fall 2018

Math 20C is the first quarter of vector calculus (also known as multi-variable calculus). This course will follow the same progression as single variable calculus in the sense of studying functions, their derivatives, and their integrals. The new material will come from the fact that the functions we consider may have inputs and outputs of more than one variable. The material will be covered faster than in most single variable calculus courses. We will cover functions, derivatives, and integrals all this quarter.

The book for the course is *Vector Calculus*, sixth edition by Jerrold E. Marsden and Anthony Tromba. We will cover all of chapters 1, 2, and 3, sections 1 and 2 from chapter 4, and all of chapter 5. Here are the pertinent syllabus details for the course.

Instructor: Joseph Ferrara
Email: jferrara@ucsd.edu
Office: AP&M 6321
Office Hours: Mondays and Fridays 10am-11am, Wednesdays 2pm - 3pm

Lecture: MWF 8:00 - 8:50 am, Center Hall 119

Course Webpage: `http://www.math.ucsd.edu/~jferrara/20CFall18/`

Textbook

- *Vector Calculus*, sixth edition by Jerrold E. Marsden and Anthony Tromba. Published by W. H. Freeman and Company, 2012.

- We will also be using an online homework program called WebAssign. WebAssign may be purchased with the book at the bookstore or separately. WebAssign will be necessary in order to do the online homework. See the section on WebAssign at the end of this syllabus for more information about how to access the online homework through WebAssign.

Midterms

    Midterm 1: Friday, October 19 in lecture
    Midterm 2: Wednesday, November 14 in lecture

There will be no make up midterms. It is your responsibility to make it to the midterms. You will be allowed one hand written 8.5 by 11 inch paper of notes on the midterms. No books, calculators, or other written or electronic aids are allowed during the midterms. You must bring your student ID to the midterm.

Final: Monday December 10 from 8:00 - 11:00 am. The location is to be determined. There will be no make up finals. You must pass the final in order to pass the class. You will be allowed one hand written 8.5 by 11 inch paper of notes on the midterms. No books, calculators, or other written or electronic aids are allowed during the final. You must bring your student ID to the final.

Homework

- There will be online homework every week except for the weeks when there are midterms. The online homework will usually be due Fridays at 5pm, except for the week of Thanksgiving (when it will be due Tuesday 11/20 at 5pm) and the last week of lecture (when it is tentatively scheduled to be due Thursday 12/6 at 5pm). The homework will be done online through WebAssign. The word due in this context means submitted through WebAssign by the scheduled time and date. No late homework will be excepted.

- There will also be assigned homework in the book that will not be collected or graded. The quizzes in section will be to do one or two problems (usually the harder or hardest ones) from the assigned homework in the book. The midterm and final questions will be similar to the questions assigned in the book.

Quizzes

- There will be six quizzes in section on the dates of 10/8, 10/15, 10/29, 11/5, 11/26, and 12/3. The lowest two quiz scores will be dropped. The quiz will consist of one or two problems from the assigned homework in the book (usually the harder or hardest problems). The quiz will be given the last 10-15 minutes of section.

Grade Breakdown: You will receive the higher of the following two weighted percentages:

Standard: WebAssign Homework 16% (each homework assignment worth 2%)
Quizzes 4% (each non dropped quiz with 1%)
Midterm 1 20%
Midterm 2 20%
Final 40%

Final Heavy: WebAssign Homework 16% (each homework assignment worth 2%)
Quizzes 4% (each non dropped quiz worth 1%)
Highest Midterm Score 20%
Final 60%

You must pass the final for the class in order to pass the class. If you do not pass the final for the class, your final letter grade will be an F. Otherwise, your final letter grade will be based on the following grading scale:

A+	A	A-	B+	B	B-	C+	C	C-	F
97-100	93-96	90-92	87 - 89	83-86	80-82	77-79	73-76	70-72	below 70

The above scale may be adjusted to be more lenient depending on the the overall performance of the class. If you pass the final, you will not receive a letter grade based on your weighted percentage that is worse that the above table indicates.

Discussion Sections: There are six discussion sections for this course:

A01	M 7:00 - 7:50pm	HSS 1128A
A02	M 8:00 - 8:50pm	HSS 1128A
A03	M 7:00 - 7:50pm	APM 2301
A04	M 8:00 - 8:50pm	APM 2301
A05	M 7:00 - 7:50pm	SOLIS 111
A06	M 8:00 - 8:50pm	SOLIS 111

You must be enrolled in a section. Graduate student teacher's assistants will lead the sections, answering questions that you have about material from the course. Quizzes will be held in section during the last 10-15 minutes.

Accommodations: Students with special need or disabilities please provide the instructor with an Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD, `http://disabilities.ucsd.edu/`) as soon as possible.

Academic Honesty: Academic dishonesty is a considered a serious offense at UCSD and will not be tolerated. Students caught cheating will face an administrative sanction which may include suspension or expulsion from the university. See the UCSD Policy on Integrity of Scholarship (`http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/Appendices/2`).

General Notes: On the exams (the midterms and final) you are responsible for knowing any material taught in lecture or written in the book in the sections covered. You are also responsible for knowing all the information taught in prerequisite math courses for this course.

Reading the book and doing practice problems is an important part of succeeding in a math course. It can be helpful and is recommended to read the sections covered in lecture in the book before lecture. Even if when reading not everything is understood, familiarizing yourself with the words and ideas will make digesting them in lecture easier.

When doing homework problems, the book is an essential resource. If you are stuck on a homework problem, referring to notes from lecture or the book, you will likely find the ideas needed to solve the problem or an example that is similar and will help you solve the problem.

WebAssign Notes:

- You will need to purchase an access code to access the course for the full quarter. An access code may be purchased at the bookstore or online.

- The class key for the course is: ucsd 7686 9119.

- Here is a useful link for getting started with WebAssign: `http://webassign.net/manual/Student_Quick_Start_Guide_SE.pdf`

- Here are instructions for how to obtain access to the class through WebAssign for the first time.

  1. Go to the website: `https://www.webassign.com/students/getting-started/`.
  2. Click the line that says, "My instructor has provided a class key in this format: myschool 1234 5678." A paragraph should appear on the webpage.
  3. In the paragraph that appeared click the link "Enter your class key and log in."
  4. In the boxes enter the class key. Put ucsd in the first box, 7686 in the second box, and 9119 in the third box. Then click Enroll.
  5. If our course shows up (Course: 20C - A00, Instructor: Joseph Ferrara, Institution: University of California San Diego), then click "Yes, this is my class."
  6. Either Create an account or sign in with a Cengage (the company the runs WebAssign) account, or link to your WebAssign Account.
  7. After doing all the previous steps, if this is your first time accessing the course you should have access to the course. In order to obtain access for the rest of the quarter you need to use your access code for the course that you purchased. When accessing the course for the first time it may say at the top of the page that you have some number of days grace period and to use an access code to get access. It should also have a link that sends you to a webpage where you can either enter your access code or purchase an access code.

  After you obtain access for the first time, you should be able to access the course by logging into WebAssign or Cengage with your ligin information.

  If you have any trouble with WebAssign, the costumer support number for Cengage (the company that runs WebAssign) is 1-800-354-9706. You can call the number any time and if you follow the correct prompts you can get someone on the phone to help with WebAssign.