MATH 550 — Spring 2013

Professor:	Prof. Kustin
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web site:	www.math.sc.edu/∼kustin/teaching/550/550.html
Office Hours:	I will usually be available in my office on Tuesday and Thursday from 2:00 PM to 3:00 PM. If you want to guarantee that I will be available, make an appointment. At other times, you should make an appointment.

Text Book: "Vector Calculus, Sixth Edition" by Jerrold Marsden and Anthony Tromba, published by W.H. Freeman. We cover Chapters 5 – 8.

To succeed: Your grade is based on your performance on: the final exam, the hour exams, and the quizzes. To receive credit, your answers must be correct and your work must be meaningful, correct, and complete. Quantities that are equal must be connected by equal signs. Quantities that are not equal must not be connected by equal signs.

The most important aspect of the course is the Homework. I have assigned many problems. **Master** all of them. Do each problem until you can do it correctly. Do as many of the assigned homework problems as possible in test-like conditions; that is, no calculator, no one watching over your shoulder, no solution sitting in front of you, no "answer" from the back of the book in front of you. It is not possible to learn a new skill by watching some one else do it (think of playing golf, or tennis, or basketball); you MUST practice the new skill yourself. You will be get plenty of instruction in lecture. You will get plenty of feed-back on the quizzes and on the hour exams. If you want to succeed in the course, you must spend many hours practicing the new skills that you are learning – that is, you must spend many hours mastering the homework. (There is no short-cut to learning Mathematics.)

The second most important aspect of the course occurs in the lectures. Something important is done in every lecture. Many lectures depend on the lectures that came before them. When a student misses a lecture, that student has significantly jeopardized his or her chances of succeeding in the course.

The third most important aspect of the course is the material from the previous courses: first, second, and third semester calculus, trigonometry, and high school algebra. We use concepts and techniques from these earlier courses all the time. All students that succeed in advanced calculus are very good in first, second, and third semester calculus, trigonometry, and high school algebra by the end of the semester. If you come upon some topic from one of these earlier courses that bewilders you, be sure to get it straightened out! If you make a high school algebra mistake on a quiz or exam, then you can be certain that the issue will come up again. **Be sure that you never make that mistake again!** To improve your high school algebra skills: **think** about what you are doing. Presumably, you are claiming that two quantities are equal. **WHY** are they equal? If you can not explain why the two quantities are equal, then they probably are not equal!

Mistakes: A poor performance on a given quiz or hour exam does not doom you to a poor grade in the course. Figure out what you did wrong. Do not make those mistakes again. I will surely ask something similar later. Get it right the next time.

Homework: To succeed in the course, DO (rather than read or watch) all of the homework, until you are sure that your answer is correct. Do the homework in a timely manner (that is, before I go over it in class.) ASK about the problems that cause you difficulty.

The list of all homework questions for the semester may be found at my website. I will assign a few homework problems each class. Be sure to do these problems before the next class. **The quiz questions will be taken directly from the homework.**

Quizzes: There will be 6 quizzes: Jan. 22, Feb. 5, Feb. 26, Mar. 7, Apr. 4, and Apr. 16. Each quiz will be worth five points. **The quiz will consist of one problem from the assigned homework problems.** THERE WILL BE NO MAKE-UP QUIZZES. Quiz solutions are posted on my website shortly after the quiz is given.

Hour Exams: There will be two hour exams. They will be given:
Thursday, February 14 and
Tuesday, March 26.

Each hour exam is worth 50 points. THERE WILL BE NO MAKE-UP EXAMS. Exam solutions are posted on my website shortly after the exam is given.

Final Exam: The final exam is worth 100 points and will be given on Tuesday, May 7, at 12:30 PM.

Final Grade:

30 points	Quiz score
100 points	Exam score
100 points	Final Exam
230 points	Total.

207–230	A
184–206	B
161–183	C
138–161	D

Do keep in mind, however, that attendance is required. Poor attendance will result in a grade penalty. See `http://bulletin.sc.edu/content.php?catoid=36&navoid=3738` **the University attendance policy, as described in the undergraduate bulletin, for more details.**

Drop Date: The last day to drop without receiving a WF: Monday, March 4, 2013. You will have 1 exam and 3 quizzes before that day.

Manners: If you plan to leave before class is over, the correct procedure is to mention this to me before I start class. It is impolite, disruptive, and a bad idea to leave class while I am lecturing unless you have followed this procedure.

Old Exams: The exams I gave the last few times I taught this course are available at my web site.

Prerequisites: Qualification through placement or a grade of C or better in MATH 241.