

Math 223 – Calculus III – Fall 2009

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Office Hours: M WTF 10:00 - 11:15
M WT 2:00 - 2:50

If these hours are not convenient, please make an appointment for another time.

Course Goals: This is a continuation of Calculus I and II and has much the same spirit and even some of the same goals. Thus one significant, but vague, goal for the course is to learn how to learn for yourself. More specific goals include being able to:

1. understand the algebra and geometry of vectors;
2. define and use the basic properties, both algebraic and geometric, of partial derivatives, gradients, line integrals, and double and triple integrals;
3. optimize functions of several variables;
4. states and use the four main integral theorems;
5. apply the ideas of the course in diverse situations without the prompting of the text or instructor;
6. discuss, in oral and written formats, the main pieces of the course.

Text: *Essential Calculus, Early Transcendentals* by James Stewart
We will cover Chapters 9-13.

Quizzes: There will be a short quiz each Friday on the material discussed during the week. The problems on the quiz will be similar in spirit to the problems assigned during the week.

Homework: Problems will be assigned every day. It is your responsibility to work the problems (and more, if necessary) until you understand the material. At the beginning of each class, you will be given the opportunity to ask about the problems or other material from the book. Please have your question(s) ready to ask.

In addition to these problems (or as an opportunity to get some credit for doing them), you will be required to complete one or more online assignments each week. These are (even numbered) problems from the book that will be graded online through the webpage: www.webassign.net. There is a charge of \$35 payable online to WebAssign, although WebAssign is nice enough to give you full access for two weeks before you must enter payment. (Neither I nor Bradley receives any compensation from WebAssign.) You need to register for this service at the web page given above. I have already set up the account for the class there, so they are waiting for you to register. Your login name is your Bradley email login name (usually first initial followed by last name). The institution code you will be asked for is "bradley" (without the "). Your (temporary) password is your middle initial (entered as a capital letter) followed by your Bradley student ID number. If you either don't have a middle initial or have not told Bradley about your middle initial, then your password is X followed by your Bradley student ID number. This password is not secure; you should change your password as soon as possible. (If you already have a WebAssign account, you should use your "old" username and password.)

Tests: Tests will be given on the following days:

SEPT 25 (Fri), OCT 23 (Fri), NOV 23 (Mon)

I do not normally give make-up tests. Your course grade will suffer significantly for missed tests. If you must miss a test, see me before the day of the test.

Final Exam: Saturday Dec 12, 2:30 - 4:30

Grading:

3 one hour tests	45%
quizzes	20%
homework (online)	15%
final exam (cumulative)	20%

Grading scale:

90-100	=	A
80-89	=	B
70-70	=	C
60-69	=	D
0-59	=	F

Calculator: A TI-89, TI-92, TI-Voyage (or equivalent) may be useful.

Final note: Calculus is a cumulative subject. You will learn something on one day and need to use it the next. Therefore it is extremely important that you keep up with the pace of the course. If you need assistance, seek it immediately. Ask me, ask your buddy, ask your mother, but do not put off this course. I am very interested in your succeeding in calculus and I am eager to help you learn, but if you fall significantly behind you will be unable to catch up.

As a rule of thumb, you should be studying & working problems between two and three hours outside of class for each hour of class. This means that you should be working eight to twelve hours per week on calculus. If you spend fewer hours on this course, you will likely not achieve the goal you desire. The good news is that calculus is interesting and its ideas are fun to think about; the problems are challenging and the course concepts will have application in many of your other courses.