

Math 122
Calculus II
Fall 2012

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Office Hours:
Mon 3:00 – 4:00
TuTh 2:00 – 3:30
after class, or by arrangement

Textbook: Stewart, *Single Variable Calculus (Early Transcendentals)*, 7th edition

Grades

Course grades will be determined on the basis of 3 midterm exams, a final exam, almost-daily quizzes, and homework assignments. All graded activities will be combined into a percentage of possible points (details available if you wish) that will be converted to a course grade on a scale that is at least as generous as the following:

95 – 100	A	80 – 82	B–	63 – 65	D+
91 – 95	A–	78 – 80	C+	< 63	D, D–, or F (depending in part on a subjective assessment of your work)
89 – 91	B+	67 – 78	C		
82 – 89	B	65 – 67	C–		

Final exam is Saturday, December 8, 8:30 – 11:00 a.m. The final will **not** be offered at any other time – please plan accordingly.

Midterm exams are *Thursday evenings*, September 13, October 11, and November 8.

Quizzes will be given in the first few minutes of *most* class days. They will typically consist of one short question on very recent material. Your three lowest quiz grades will be dropped.

Homework assignments will be given almost every week, due on Friday. Special homework projects, perhaps involving group work, may be assigned occasionally.

Calculators You are welcome to use a calculator, if you wish, but one is not required. A basic calculator will be useful for some of the homework problems.

Mathematica Later in the course, you will receive a short introduction to the powerful computer algebra package *Mathematica*. Details will follow.

Electronic copies

Electronic copies of many course documents and files (handouts, homework assignments, etc.) will be placed in a public folder for this course on the Academic File Server. (Possibly this means absolutely nothing to you at the moment. Don't worry, I will explain.) This is the **only way** that homework assignments will be distributed. You are invited to access other documents in the folder whenever you like.

(Over)

Cell phones: OFF.

Tutors for Math 122 are available at the Math Support Center (upstairs in Ohlendorf) every weeknight, Sunday through Thursday. Details will follow.

Policy on homework collaboration

Working together with other people is a great way to learn mathematics. I encourage you to work together on the homework, if you find that it helps you to learn. However, homework for this course is also graded, as part of your final course grade. Each student must write up his or her own homework solutions. By handing in homework solutions to be graded, you are promising that you took part in solving the problems, and that you are not just copying someone else's work. Handing in homework to be graded when you did not participate in solving the problems is a violation of the Honor Code.

For group assignments, each group will turn in a single project or solution. All members of the group must participate in creating the group's final product.

Make-up Exams and Extensions on Assignments

Extensions on the due dates of assignments and individual re-scheduling of exams will be granted only for the following reasons:

- Serious and verifiable illness or medical emergency
- Participation in an *official* Rhodes College activity (e.g., course field trip, sports team travel)
- Religious holidays
- Major life event (such as birth, wedding, death) – your own or a close family member
- Other genuine emergency that is beyond your control

Notice that this is an extensive list. It does not, however, include situations in which the timing of an exam or assignment is simply inconvenient for you. In particular, there will be no accommodation for ordinary travel arrangements before or after college breaks.

If you wish to request an extension or re-scheduling because of a situation which can be known ahead of time, it is your responsibility to make arrangements in advance. Permission might not be given after the fact. You may be asked to make your request in writing.

In all cases, your instructor is the final judge of whether an accommodation is warranted.

About the course

Course goals: To develop an understanding of the theory and applications of integral calculus
To learn the basic principles and techniques of infinite series

This course is intended to lead you to an understanding of integral calculus, infinite series, and their applications. Its approach follows what is sometimes called the *Rule of Four*: Every topic is presented *algebraically, numerically, in graphs, and in words*. You will be asked to engage the course material from all of these points of view.

The style of this course may be different from your experience in previous math courses – even if you have studied some calculus in the past. Calculus is more than just rules for turning algebraic formulas into other algebraic formulas. Indeed, with the advances in current technology, much of the algebraic side of the subject can be done automatically by computers. Real understanding comes in knowing what the formulas tell you, and how to apply them in real and diverse situations.