

Mathematics 121, Calculus I  
Fall Semester 2009  
Associate Professor Dr. Terri Lindquenter

Text: ***Calculus—Early Transcendental Functions—4<sup>th</sup> Edition***, by Larson, Hostetler and Edwards.

My Office: 422 Ohlendorf Hall

Office Hours: 2:00-3:00 MWR and Tues. 2:15-3:00 (or by appointment)

Phone: 843-3254

Email address: [lindquestert@rhodes.edu](mailto:lindquestert@rhodes.edu)

**Course Description and Objectives:** Calculus is one of the great triumphs of human thought. It is the quantitative study of how things in our world change. You may have heard that Calculus is a hard mathematics course, but many people don't even know what it really is. If you are good at your algebra skills and know some trigonometry, then Calculus is really not that difficult. Calculus is a powerful tool used by physicists, engineers, biologists, economists, and other professionals to model changing systems that impact our daily lives. The objectives of this course are to guide you in developing a firm conceptual understanding of calculus and to help you master the methodology of doing calculus. We will cover limits, continuity, differentiation rules, related rates, curve sketching, optimization problems, definite and indefinite integrals, the Fundamental Theorem of Calculus, areas, and a diverse array of applications of these ideas. We will cover most of Chapters 2-5 of your book. The main goals of this course are to challenge your curiosity about, to foster an appreciation for, and to aid you in your discovery of the significance of this beautiful subject.

**Expectations and Homework:** In order to learn and appreciate Calculus, you must actively participate by attending and contributing in class, by working homework problems daily, by participating in discussions outside of class, and by "pre-reading" your textbook.

The biggest factor contributing to your success in this course is the daily practice of homework problems. You are expected to attempt each set of homework problems assigned. **This means working calculus problems just about every day.** Learning calculus requires practice, just like you would practice a musical instrument for a recital or practice a sport for a big game. Please understand that you must routinely "do" calculus to learn it and to appreciate it!

I will not collect the daily homework for a grade, but you are expected to work all the assigned exercises and request help immediately if you are struggling. Please utilize my office hours, form study groups with fellow students (the **Math Support Center** can help with this), or visit the **Math Support Center** if you need help with your homework. If you get behind in a mathematics course, it is terribly difficult to catch up.

You are free to work with other students on homework and discuss ideas and ways to solve the problems. Collaborating with fellow students is an excellent way to learn mathematics. But you may not blindly copy solutions of other students. That act is a violation of the honor code. You must work out, solve, and write up your own solutions.

You should have a spiral notebook so as to have an organized place for your completed homework. You should also have another spiral notebook or binder (with pockets) for your class notes and handouts.

**Attendance and Policies:** You are expected to attend all classes. Obviously there are circumstances which might require you to miss a class. If this happens, you are responsible for all material covered in class whether you are present for that material or not. If I notice a pattern of absenteeism, I will contact the Office of Academic Support.

**You are expected to make all scheduled testing dates.** However, if you know in advance that you must miss a test for a very important reason, please tell me at least a week before the scheduled testing day, if you are able. Often we can arrange for you to take the test early. (Examples of very good reasons for missing a test: death in the family, your sister's wedding, serious illness in your family, you are ill. Examples of unacceptable reasons for missing a test: had another test on the same day, had a paper due, overslept, too tired, too busy with other courses or activities. You get the idea.)

Certainly if you become ill on the day of the test and feel you are too sick to take the test, an alternate testing date can be arranged. In this event, you **must contact me no later than the day of the missed test.** There are no exceptions to this rule. The reason for this policy is so that testing is fair for everyone in the class.

If you are a member of a Rhodes-sponsored team, please keep me posted well ahead of time if you need to be out of town. We will work something out.

**Cell Phones and Laptops:** Please remember to turn off your cell phone during class. Since note-taking in mathematics classes normally involves writing many symbols, I do not believe it will be efficient or effective to take notes via your laptop computer. If you have a certain disability which requires the use of a laptop for note-taking, please visit the Office of Disability Services for further advice on the protocol to receive the appropriate accommodations. Otherwise, please do not use your laptop during class.

**Tests, Quizzes, and Assignments to be Graded:** There will be three major in-class tests, five quizzes, and two assignments/projects that will be graded. The final exam will be cumulative. The graded assignments will be projects or homework problems that require more in-depth, extended thought and conceptual reasoning. These projects will likely involve group work and will require neatly organized and thoroughly written solutions.

There will be no “pop” quizzes. You will be allowed to drop one quiz grade.

**There will be no make-up quizzes, so if you miss a quiz day for any reason, you may drop that grade.**

Below is the testing schedule for this course. (Occasionally, a testing date may need to be changed due to unforeseen circumstances, but that is not a common occurrence.) These dates are given to you in advance for your planning convenience. Please put them on your calendar.

Dates:        First day of class, Wednesday, Aug. 26.  
                  Quiz #1, Wednesday, Sept. 9.  
                  Quiz #2, Monday, Sept. 21.  
                  Test #1, Wednesday, Sept. 30.  
                  Quiz #3, Wednesday, Oct. 14.  
                  Test #2, Wednesday, Oct. 28.  
                  Quiz #4, Monday, Nov. 9.  
                  Quiz #5, Friday, Nov. 20.  
                  Test #3, Monday, Dec. 7.  
                  Last day of class, Wednesday, Dec. 9.

Final Exam: Section 3, Fri., Dec. 11, 5:30 pm  
                  Section 4, Tues., Dec. 15, 1:00 pm

**Grading:** Grading percentages are as follows:

Quizzes and Projects: 20%

Test #1: 20%

Test #2: 20%

Test #3: 20%

Final Exam: 20%

**Honor Code:** You are expected to observe the honor pledge you signed at all times. I, as I am sure you do, take the Rhodes Honor Code very seriously and will act as I am expected should I witness a possible violation. Do not take any risks!

**Grading Scale:**

|    |        |    |       |    |          |
|----|--------|----|-------|----|----------|
| A  | 93-100 | B- | 80-82 | D+ | 67-69    |
| A- | 90-92  | C+ | 77-79 | D  | 63-66    |
| B+ | 87-89  | C  | 73-76 | D- | 60-62    |
| B  | 83-86  | C- | 70-72 | F  | below 60 |

*If you have a documented disability and wish to receive accommodations in this class, please register with the Office of Disability Services as soon as possible.*