

## Syllabus for Mathematics 122, Section 009, Spring 2010

TIME AND PLACE: MWF, 1:25 p.m. – 2:15 p.m., LC 113

INSTRUCTOR: Ralph Howard

OFFICE: LC 304

PHONE: 777-2913

OFFICE HOURS: MWF 10:30 a.m. 11:30 a.m. and by appointment

E-MAIL: [howard@math.sc.edu](mailto:howard@math.sc.edu) TEXT: *Applied Calculus* by Hughes-Hallet, Gleason, *et.al.* Third Edition.

CALCULATORS: The class demonstrations will be with the TI-83 and most of this should also apply to the TI-82. There are several types of calculators that will do all that is required for the class and you are welcome to use them. However for calculators other than the TI-83 and TI-82 I may not be able to help with the programming.

CLASS WEB PAGE: <http://www.math.sc.edu/~howard/Classes/122m/>

The solutions to all the quizzes will be posted here.

**Tests:** There will be three midterms and a final. The midterms count for 100 points each and the final is 150 points. The dates of the tests are

Test 1 Friday, February 12

Test 2 Friday, March 19

Test 3 Monday, April 19

Final Saturday, May 1, 2:00 p.m.

**Homework and quizzes:** Homework will be assigned, but not graded. There will be daily quizzes based on the homework which will count for 100 points. ***Important note:*** The quiz total counts as much as a test so it is important that you show up and take the quizzes.

**Grading:** There is a total of 550 points possible for the term broken down as follows:

Three midterms @ 100 points each	300 points
Total for Quizzes	100 points
Final	150 points
Total	550 points

Your grade will be based on the total out of 550. The last day to drop without a grade of WF is Thursday, October 1 and you should have a good idea of where you stand by then.

**Prerequisites:** This class has a prerequisite of a grade of C or better in Math 111 or 115 or qualification through placement. If you have not met these prerequisites you should not be here.

**There will not be make up exams or quizzes:** If you miss a test, then your score on that exam is 75% of the average of your other test scores including the final. If a second exam is missed the score on it is zero. Exams will be taken in class on the days listed above. So don't ask to take an exam early or late because you have to be "out of town" or some other reason. Likewise there will not be make up quizzes. If you miss a quiz then you lose the points. As a reward anyone who

takes all the quizzes will get 10 extra points. Missing only one quiz is worth 5 extra points. On the other hand if someone leave class early without permission then I reserve the right to give them a zero on quiz for the day.

**Sharing calculators on quizzes and tests is not allowed:** You should bring your calculator to every class meeting and especially to tests. If you do not bring it them you will not be allowed to share a calculator with someone else from the class on quizzes or tests and will thus lose the points on those questions that need a calculator. While some cell phone have calculators built into them, use of cell phones, even as a calculator, during tests or quizzes is not allowed.

**About partial credit and bad algebra:** Some arithmetic errors do not bother me much. If your get in a hurry and get  $7 \times 8 = 48$  it is not going to cost you much, provided you are doing everything else correctly. However, there are certain mistakes (all involving misuse of high school in such a way that always gives wrong answers), that will not be tolerated. If you make these mistakes I will mark the entire problem wrong. Here are some examples of zero point errors:

$$\sqrt{x+y} = \sqrt{x} + \sqrt{y}, \quad (x+y)^2 = x^2 + y^2$$
$$\frac{\log(2x)}{2} = \frac{\log(\cancel{2}x)}{\cancel{2}} = \log(x), \quad \frac{2x+3y}{3z} = \frac{2x+\cancel{3}y}{\cancel{3}z} = \frac{2x+y}{z}$$

This is not meant to scare you, but just to let you know where things stand.

**Learning Outcomes:** Being able to work with derivatives and integrals of elementary algebraic, exponential, and logarithmic function Derivatives and integrals of elementary algebraic, exponential, and logarithmic functions. Using the integral and derivative to be able to find maxima, minima, rates of change, motion, area under a curve, and volumes.

**Getting help:** Besides my office hours you can get help in the Math Lab. This is a free tutoring service supplied by the mathematics department. There are four locations LeConte room 105, Bates House - by room with pool tables (south of Blatt P.E. Center), Columbia Hall - room 113 (Pendleton & Barnwell), Sims - back table in lounge off front porch (Greene, between Pickens and Bull) The schedule can be found at <http://www.math.sc.edu/mathlab.html>