Syllabus for Mathematics 122, Section 009, Spring 2013

TIME AND PLACE: MWF, 1:25pm – 2:15pm, BA 402
INSTRUCTOR: Ralph Howard OFFICE: LC 304 PHONE: 777-7471
OFFICE HOURS: MW 2:20pm – 3:30pm and by appointment
E-MAIL: howard@math.sc.edu TEXT: *Applied Calculus* by Hughes-Hallet, Gleason, *et.al.* Fourth 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/122o/
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 15
Test 2	Monday, March 25
Test 3	Monday, April 22
Final	Monday, May 6, 9:00 am

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: The 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 Monday, March 4 and you should have a good idea of where you stand by then.

Prerequisites: A Math Placement Test score of MB4-9 earned on the Algebra Placement Test or a grade of C or better in MATH 111 or 111I. 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 messed 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 smart phones can be used as calculators, they are not allowed on quizzes or tests.

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:

$$\sqrt{x+y} = \sqrt{x} + \sqrt{y}, \quad (x+y)^2 = x^2 + y^2$$
$$\frac{\log(2x)}{2} = \frac{\log(\not{2}x)}{\not{2}} = \log(x), \quad \frac{2x+3y}{3z} = \frac{2x+\not{3}y}{\not{3}z} = \frac{2x+y}{z}$$

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

Learning Outcomes: Upon successful completion of this course, students should be able to:

- Recall basic mathematical terms related to elementary algebraic, exponential, and logarithmic functions, and derivatives and integrals of such functions and express these terms in correct context.
- Apply the methods of calculus to solve applications involving maxima, minima, rates of change, motion, work, and area under a curve.
- Verbally interpret data given as graphs, tables, and equations and put into words the relationship between a function and its derivative or integral given in these forms as well.
- Utilize a graphing calculator to solve problems, locate maxima and minima of a function, and analyze change in a function.

Getting help: Besides my office hours you can get help in the Math Tutoring Center. This is a free tutoring service supplied by the mathematics department. It is in LeConte room 105 and the schedule can be found at
`http://www.math.sc.edu/mathlab.html`

Also there is the Peer Tutoring Program at the Student Success Center provides free peer-facilitated study sessions for 100-Level Math courses led by qualified and trained undergraduate tutors who have excelled in Math. Sessions are open to all students who want to improve their understanding of the material, as well as their grades. Tutoring for 100-Level Math is offered Monday through Thursday 7:00-9:00pm in the ACE centers in Bates Hall and Columbia Hall and Monday through Thursday 6:00-9:00pm in Sims Hall. No appointment is needed. You may contact the Student Success Center at 803-777-0684 and `tutoring@sc.edu` with additional questions.