Math 122: Calculus for Business Administration and Social Sciences
Section E01, Fall 2014
T/Th 6–7:15 pm, LeConte 101

Instructor: Danny Rorabaugh
rorabaug@email.sc.edu

Office Hours:
LeConte 105: Wed 2–4 pm
LeConte 123B: Thu 1:30–2:30 pm
LeConte 123B: Fri 11 am–noon

S.I. Leader: Samantha Munker
smunker@email.sc.edu

Websites: http://blackboard.sc.edu
http://wileyplus.com

I. Prerequisites

Qualification through the Math Placement Test or through a grade of C or better in MATH 111 or 111I.

II. 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.

III. Textbook and Materials

The textbook for this course is Applied Calculus (5th Edition) by Hughes-Hallett, Gleason, Lock, Flath, et al. Students will also need a graphing calculator and regular internet access. Announcements are often sent out via Blackboard, so a regularly-accessed email address should be used with Blackboard. See also Calculators under Course Policies and Homework under Assessment and Grading.

IV. Course Requirements

Students are expected to read assigned sections in the text, complete weekly homework assignments, and participate in lectures, quizzes, and activities each class. Students should check Blackboard frequently for announcements and course documents such as quiz solutions, exam reviews, and worksheets.

V. Course Policies

Attendance
Students are expected to attend every class, arriving on time and staying for the entirety, and to initial the attendance sheet each class. In the event of absence or tardiness, students are responsible for all missed material and announcements.

In accordance with university policy, grade penalties may be applied for students who miss over 10% of classes, for any reason, excused or unexcused. We have 28 classes, so the instructor will deduct 1 percentage point from the final grade for each absence in excess of 3.

The instructor may choose not to penalize for absences with official documentation of illness or emergency. It is the student’s responsibility to provide said documentation within 1 week of the absence(s).

Late work and make-up work
Late work will not be accepted. There are no make-up assignments. Each student may retake 1 quiz. The student must notify the instructor of retake intent within 48 hours (2 days) of when the graded quiz was returned to the class.
Missed Exams
Tentative exam dates are found below under Assessment and Grading. In general, no make-up exams will be given. Exceptions may be made for documented illness or emergency, provided the instructor is notified via email as soon as the student knows they will be missing the exam. No accommodations will be made for travel plans. If exam dates conflict with religious observances, the instructor is to be notified in the first week of classes.

Disruptions
Disruptive behavior will not be tolerated. Electronics – except those used for mathematical or medical purposes – are not permitted during class.

Withdrawal
The last day to drop without a grade of W being assigned is Wednesday 27 August. The last date to withdraw without a grade of WF being assigned is Thursday 09 October.

Calculators
Calculators may be used on quizzes and exams, except as otherwise instructed in class. The TI-83 or TI-84 is highly recommended. Use of the TI-89, TI-Nspire CAS, or any calculator with built-in CAS (computer algebra system) is prohibited. You may be asked to clear the memory in your calculator prior to each exam. The instructor will not have a calculator for students to use, so it is recommended that each student bring back-up batteries to exams.

Honor Code
The Honor Code applies to all work for this course. Students should review the Honor Code at http://www.sc.edu/academicintegrity. Students found violating the Honor Code will be subject to discipline.

VI. Assessment and Grading

Homework
There will be regular assignments online at WileyPlus.com. Instructions for creating an account can be found under Course Documents in Blackboard. Use your USC email credentials to login at http://blackboard.sc.edu.

Assignments from a given week will generally be due an hour before class on Tuesday the next week. However, it is the student's responsibility to regularly check WileyPlus and to begin working on homework in a timely fashion.

Quizzes
There will be a written quiz each non-exam week. Students will complete quizzes individually. The lowest quiz score will be dropped.

Exams
There will be three exams throughout the semester and a final exam. The final exam date and time is fixed by the university. Exams are tentatively scheduled as follows:

- Exam 1: Tuesday 23 September
- Exam 2: Tuesday 21 October (two days before Fall Break)
- Exam 3: Tuesday 25 November (the day before Thanksgiving Recess)
- Final: Tuesday 09 December, 7:30–10 PM

See the policy for missed assignments, quizzes, and exams under Course Policies above.
Grades
Grades will be weighted as follows:

9% Homework
15% Quizzes
51% Exams (three, 17% each)
25% Final Exam

Letter grades will be assigned based on overall percentage – not rounded – using the following scale:

- 90 ≤ grade < ∞  A  Astounding Job!!!
- 85 ≤ grade < 90  B+  Bravissimo!!
- 80 ≤ grade < 85  B  Bravo!!
- 75 ≤ grade < 80  C+  Congrats!
- 70 ≤ grade < 75  C  Cool beans!
- 65 ≤ grade < 70  D+  Didn't quite meet expectations.
- 60 ≤ grade < 65  D  Did not meet expectation.
- −π ≤ grade < 60  F  Fell through this time around...

VII. Additional Help

Tutors are available Monday through Thursday from 11 am to 4 pm in the Math Tutoring Center in LeConte 105 (www.math.sc.edu/math-tutoring-center).

Tutors are also available through the Student Success Center, both online (sa.sc.edu/ssc/virtual) and at their satellite locations in the dorms (sa.sc.edu/ssc/peertutoring): 7:30–10 pm in Sims Hall, Columbia Hall, and Bates House.

Help is available through supplemental instruction (sa.sc.edu/ssc/supplementalinstruction). Our S.I. Leader's contact information is listed at the top of the syllabus.

Students are encouraged to come see me during office hours (see top of syllabus) which requires no appointment. Students may also email me to schedule an appointment outside of my posted times.

VIII. Tentative Course Outline

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<th>Rough Topic Summary</th>
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<td>1.1-1.9</td>
<td>Functions, Rate of Change, Transformations</td>
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<td>09/11 – 09/18</td>
<td>2.1-2.3</td>
<td>Instantaneous Rate of Change, Derivatives, Exam Review</td>
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<td>09/23</td>
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<td>Exam 1</td>
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<td>09/25 – 10/07</td>
<td>2.4-2.5, 3.1-3.4</td>
<td>Second Derivatives, Derivative Rules</td>
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<td>10/09 – 10/16</td>
<td>4.1-4.4</td>
<td>Maxima, Minima, Inflection Points, Exam Review</td>
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<td>Exam 2</td>
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<td>10/28 – 11/06</td>
<td>5.1-5.5</td>
<td>Areas, Definite Integrals, Fundamental Theorem of Calculus</td>
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<td>11/11 – 11/20</td>
<td>6.1-6.3, 6.6</td>
<td>Antiderivatives, Indefinite Integrals, Substitution, Exam Review</td>
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