MATH 141

Calculus I

Sections 005 and 006 - Fall 2012

Meeting times: MWF 10:10 - 11:00 AM at LeConte (LC) 412.

Instructor: Dr. Peter G. Binev

http://www.math.sc.edu/~binev/e-mail: binev@math.sc.edu

phones: 576-6269 (at <u>LC</u> 425) or 576-6304 (at <u>SUM</u> 206H)

Office hours: MWF 11:00 - 12:00 AM at LeConte 425 or by appointment.

Recitations (held by Marvin Jones)

Section 005: Th 8:00 – 8:50 AM at <u>LC</u> 115; Section 006: Th 9:30 – 10:20 AM at <u>LC</u> 115.

Maple Labs (held by Marvin Jones)

Section 005: T 8:00 – 8:50 AM at LC 303A; Section 006: T 9:30 – 10:20 AM at LC 303A.

Text: Calculus, Early transcendentals by James Stewart, *Sixth Edition*, Cengage Learning 2008. The course will cover the material considered in chapters 1-6.

Description: Functions, limits, derivatives, introduction to integrals, the Fundamental Theorem of Calculus, applications of derivatives and integrals.

Credits: 4

Prerequisites: placement code MA4-9 or MD0-9 required; earned by grade of C or better in MATH 112. 115, 116, or by Precalculus Placement Test.

Learning Outcomes: Upon the successful completion of this course students will be able to:

- recall basic mathematical terms related to elementary algebraic, trigonometric, exponential, and logarithmic functions, and derivatives and integrals of such functions and express these terms in correct context;
- employ knowledge of limits, derivatives, integrals, and the Fundamental Theorem of Calculus to describe functions, analyze graphs, and interpret data, and to solve applications involving maxima, minima, rates of change, motion, and area under a curve;
- utilize modern computing software (Maple) to solve problems related to the concepts listed above.

Outline: The detailed schedule with the covered sections and the assigned homework will be posted on Blackboard. The following shows the time allocated for each of the chapters:

- · Chapter 1 1 week;
- · Chapter 2 2 weeks;
- · Chapter 3 3 weeks;
- · Chapter 4 3 weeks;

- · Chapter 5 2 weeks;
- · Chapter 6 2 weeks;
- · Final Review 1 week.

Attendance: Regular class attendance is important. A grade penalty will be applied to any student missing five or more classes (10%) during the semester. The "10 percent rule" stated above applies to both excused and unexcused absences. Students who anticipate potential excessive absences due to participation in permissible events as described in the USC Academic Bulletins (http://www.sc.edu/bulletin/ugrad/acadregs.html#class atten.) should receive prior approval from the instructor to potentially avoid such penalty.

Cell Phones and Calculators: All electronic devices, especially cell phones, *must be disabled* during the class. No calculators are allowed.

Homework and Quizzes: A few homework problems will be assigned each class. Be sure to solve and write these problems before the next class. The homework will not be collected or graded. There will be several five-minute quizzes at the end of some classes on problems similar to ones from the homework. Each quiz will be graded 0 or 1 (no partial scores). The quiz grade will be the number of successfully solved quizzes but will not exceed 10. It will account for 10% of the final grade.

Midterm Exams: There will be two midterm exams in a form of a test. The tentative dates of the exam are **September 28** and **October 31**. The problems on the tests will be similar to the ones from the homework and the discussions in class. There will be **no makeup exams**.

Maple Labs and Recitations: These are held by the Teaching Assistant. The grades assigned will constitute 30% of the grade for the class (15% for the Maple labs and 15% for the recitations). See the syllabus for the Maple labs and Recitations for details.

Final Exam: The final exam in a form of a test will take place on **Friday**, **December 14 at 9:00 AM**. All students **must** take the final exam.

Grading: The final grade will be determined from the quiz grade (10%), the midterm exams (15%+15%=30%), the Maple-lab grade (15%), the recitations grade (15%), and the final (30%). The letter grades will be assigned as follows: **A** for at least 90%; **B**+ for at least 86%; **B** for at least 80%; **C**+ for at least 76%; **C** for at least 70%; **D**+ for at least 66%; **D** for at least 60%; **F** for less than 60%.

Supplemental Instruction: The SI Leader for this class is **Kevin Wood**. He attends the lectures and then holds *study sessions* three nights a week to answer your questions on the lecture, to help you with homework, and to work additional problems.

Math Lab: The Math Lab is a free tutoring service for all 100-level math courses. No appointment is necessary. See http://www.math.sc.edu/mathlab.html for details.

Academic Dishonesty: Cheating and plagiarism will not be allowed. The University of South Carolina has clearly articulated its policy governing academic integrity and the students are encouraged to carefully review it: http://www.housing.sc.edu/academicintegrity/policy.html.

ADA: If you have special needs as addressed by the Americans with Disabilities Act and need any assistance, please notify the instructor immediately.

Important Dates:

- · August 29 Last day to drop without **W**
- · September 3 Labor Day no classes
- · September 28 Midterm Exam 1
- · October 10 Last day to drop without **WF**
- · October 18-19 Fall Break no classes
- · October 31 Midterm Exam 2
- · November 21-23 Thanksgiving no classes
- · December 7 Last Class
- December 14 Final Exam at 9:00 AM