Salem State College
Mathematics Department
Autumn, 2007

Course: Mat 220: Calculus I
Section: 03
Course access: http://www.coursecompass.com
Course ID online: poitevin87902
Room: SB 311
Schedule: MW 2:00 - 3:40
Instructor: L. Pedro Poitevin, Assistant Professor
Office: Sullivan Building 308B
Office hours: TuTh 4:00 — 5:00; WF 11:00 — 12:15
Office phone number: (978) 542-6995
e-Mail: lpoitevin@salemstate.edu

Course description: This course is an introduction to limits, continuity, and to differentiation and its applications.

Course goals:

1. To provide students a thorough introduction to topics from calculus;
2. To illustrate the uses of calculus in applications.

Learning objectives: A student who passes this course should be able to:

1. Define and calculate limits;
2. Define and verify continuity;
3. Define and understand derivatives;
4. Calculate derivatives expertly;
5. Use derivatives to sketch qualitative graphs of functions;
6. Use derivatives to solve optimization problems;
7. Use derivatives to calculate limits (L'Hôpital’s Rule);
8. Understand Newton’s method;
9. Define antiderivatives;
10. Calculate simple antiderivatives.

Attendance policy: An advance notice for an absence to class is typically an e-mail sent to me 12 hours or more in advance of the class meeting the student will not attend. Permission for absence is typically an e-mail from me to the student to acknowledge receipt of an advance notice. Excused absences are absences for which I have advance notice, and for which the student has a permission for absence. Excused absences, if not excessive in number, will not negatively affect a student’s grade. An unexcused absence during a day when an assignment, quiz, or exam is due will result in a grade of zero for the assignment, quiz, or exam. Initially, I will not take attendance, but this may change if desirable. I reserve the right to penalize students with more than two unexcused absences by reducing their final grade by one letter grade or more. In the event that I wish to exercise this right, notice will be given to students in advance. The student is responsible for completing all course requirements and for keeping up with all that goes on in the course (whether or not the student is in attendance).


Class format: These lectures will follow an “active learning” approach. A fraction of class time will be devoted to lectures, and the rest to class work. Lectures will help you understand some of the finer points of the subject matter. Class work will allow you to gauge your understanding of calculus in the company of peers who will help you through the learning process. It will also give you an opportunity to explain to others what you have learned, which is a very effective way of solidifying one’s understanding in general. During class work, I will oversee your work and provide helpful hints. As a further element of your active participation in this class, you will often be asked to spend a minute responding to a short feedback question at the end of the lecture. I will listen and respond to this feedback.

Exams: There will be three exams: two midterms and a final. Each midterm will count for 15% of the course grade. The final will count for
30% of the course grade. The exams are scheduled as follows:

- Exam I  
  Tentatively Thursday, October 18 (in class)
- Midterm II  
  Tentatively Tuesday, November 20 (in class)
- Final  
  Wednesday, December 19 11:00 - 1:00

Quizzes: There will be quizzes every week. At the end of the semester, I will drop the lowest quiz score and compute the average of the remaining scores to account for 10% of the student’s final grade. Quizzes will be based closely on the assigned worksheets.

Worksheets: Worksheets will be assigned every week but not collected. Worksheet problems—many of them taken from the book—will show up frequently in quizzes. Often we will spend a significant portion of class time solving problems from the worksheets in small groups.

Online homework: Homework will be collected and graded online. Students should keep a complete record of all problems attempted (with solutions, if found) during the semester. Online homework will account for 20% of the student’s grade.

Participation: Because worksheets and group work will play an important role in this class, participation will play a role in calculating students’ grades. Students who ask questions and students who offer help will get full marks. Participation accounts for 10% of the student’s final grade.

Grading scheme: I reserve the right to change the following grading scheme, but it will very likely stand:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Online Homework</td>
<td>20%</td>
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<tr>
<td>Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Exam I</td>
<td>15%</td>
</tr>
<tr>
<td>Exam II</td>
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<tr>
<td>Final</td>
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Statement on Equality of Access: Salem State College is committed to providing equal access to educational experience for all students in compliance with Section 504 of The Rehabilitation Act and The Americans with
Disabilities Act and to providing all reasonable academic accommodations, aids and adjustments. Any student who has a documented disability should speak with the instructor immediately. Students with disabilities who have not previously done so should provide documentation to and schedule an appointment with the Office for Students with Disabilities and obtain appropriate services.