

Salem State College
Mathematics Department
Autumn, 2006

Course: Mat 208: Business Calculus
Room: SB 306A
Schedule: MWF 9:00 - 9:50
Instructor: L. Pedro Poitevin, Assistant Professor
Office: Sullivan Building 308B
Office hours: MWF: 1-3; TuTh: 12:30 - 1:30
Phone number: (978) 542-6995
e-Mail: lpoitevin@salemstate.edu

Course description: Introduction to calculus as applied to business. Differentiation, integration, and their applications are considered in conjunction with polynomial, algebraic, exponential, and logarithmic functions.

Course goals:

1. To familiarize students with the fundamental principles of differential and integral calculus;
2. To familiarize students with applications of differential and integral calculus, especially those related to business, economics, and finance.

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

1. Represent an appropriate relationship between two quantities with a function;
2. Understand and calculate limits;
3. Find instantaneous rates of change;
4. Calculate derivatives of functions;
5. Solve optimization problems employing calculus;
6. Use derivatives to sketch key features of a function;
7. Use exponential and logarithmic functions as mathematical tools;
8. Use techniques of integration to calculate antiderivatives of functions;
9. Find the area under the region of a curve.

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 the me 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 three 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).**

Textbook: Goldstein, Lay, Schneider, Asmar, *Brief Calculus & its Applications*, 11th edition, Pearson Education, Inc. (Required)

Exams: There will be two exams: a midterm and a final. Each exam will count for 25% of the course grade. The exams are scheduled as follows:

Midterm I	<i>Tentatively</i> Monday, October 23 (in class)
Final	Thursday, December 14: 8:00 - 10:00

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 50% of the student's final grade. Quizzes will be based closely on the assigned homework.

Homework: Homework will be assigned periodically but not collected. Homework problems will show up frequently in quizzes. Most homework problems will be assigned from the textbook, but occasionally the instructor will hand out worksheets containing problems from other sources. As time permits, we may spend some time in class working on problems in groups.

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.