

# Application of Calculus to Business and Economics

## Math 112 B and C - Winter 2005

**Instructor:** Dr. Matthew M. Conroy

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**Website:** <http://www.math.washington.edu/~conroy>

**Office Hours:** Office hours are times when you can speak to me without making an appointment - just stop by. My office hours for this quarter are listed at the web page above (or will be soon!).

**Text:** *Calculus in Business and Economics* by G.S. Monk. It can be purchased at Professional Copy & Print, 4200 University Way NE.

### Other Required Materials:

- a clear plastic ruler
  - a scientific calculator
  - packet of lecture handouts
- (purchase at Odegaard Library copy center or download from the course website)

**Course Objectives:** Students will learn the concepts of differential and integral calculus in specific contexts with emphasis on applications to economics. Topics will include: rates of change, tangent lines, derivatives, linear programming, line fitting, accumulation, area, and integrals.

**Grading:** Your grade will be made up of:

Activities	10%
Homework	10%
Participation	2%
Midterm Exams	21% each
Final Exam	36%

**Activities:** You will participate in group activities during quiz section each Tuesday. These activities are designed to reinforce or deepen your conceptual understanding of topics in the course or to introduce new topics. You will work on these activities in groups; however, each individual will hand in his/her own solutions. These activities are designed to be finished and turned in at the end of the quiz section; but, if a group demonstrates a reasonable effort and is unable to finish, the members of that group may turn in the activity at the next quiz section (but no later).

**Homework:** Homework will be assigned weekly in lecture and will be collected during Friday's lecture. Since the answers to most of the exercises are available to you, it is important that you write out complete solutions to all assigned problems. No credit will be given for simply writing the correct answer. During Thursday's quiz section, your TA will answer questions about the homework due the next day.

**Participation:** During Thursday's quiz sections, you will attempt problems from previous exams in a test-like situation and then discuss these problems as a class. You will receive points for participating in these discussions. After the discussion, your TA will answer questions over the week's homework assignment.

**Exams:** You will be allowed to use your calculator, your ruler, and one 8.5×11 sheet of **handwritten** notes for the exams. Other electronic devices will not be allowed (e.g. no cell phones, no laptops, no Palm Pilots). You may not share a calculator or a note sheet with another student on an exam.

**Important Dates:**

Exam I	Thursday, January 27	in quiz section
Exam II	Thursday, February 24	in quiz section
Final Exam	Saturday, March 12	time and place TBA

**Make-Ups:** Late activities and homework assignments will not be accepted for any reason. You will be allowed to miss one activity AND one homework assignment without penalty to your grade.

In the case of observance of religious holidays or participation in university sponsored activities arrangements must be made at least 2 days in advance for activities and 1 week in advance for exams. You will be required to provide documentation for your absence.

Make-up exams will not be given. If you miss an exam due to **unavoidable, compelling, and well-documented** circumstances, your final exam will be weighted more heavily.

**Resources:**

- The website for this course can be found via:

**<http://www.math.washington.edu/~conroy>**

Follow the link under “Current Classes” to get to the class website. You will find homework assignments, a schedule for the term, TA information, and other useful stuff there.

- The Math Study Center (Communications B-006) is open to students in MATH 112. The Center provides a comfortable place and a supportive atmosphere for students to come together and study, in groups or individually. The MSC will open for the term during the second week of classes. The center is staffed by TAs and instructors. A link on the class website will take you to the website for the Study Center for more information.
- The Center for Learning and Undergraduate Enrichment (CLUE) holds drop-in tutoring sessions every weekday evening in Mary Gates Hall Commons. There is a link to the CLUE website on the class website.
- The University of Washington is committed to providing access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation contact the Disability Services Office at least ten days in advance at: 206-543-6450/V, 206-543-6452/TTY, 206-685-7264 (FAX), or [dso@u.washington.edu](mailto:dso@u.washington.edu).
- The Student Counseling Center holds academic skills workshops on a variety of topics including stress management, test anxiety and time management to help you succeed at the University of Washington. If any of these is an issue for you, check out the schedule of workshops at

**<http://depts.washington.edu/scc/studyskills.html>**