**Math 128: Calculus II for the Life, Social and Managerial Sciences (Spring 2012)**

This course is a continuation of Math 127. Topics covered include: calculus of trigonometric functions, additional techniques of integration, introduction to partial derivatives and multiple integrals, topics in differential equations, approximation by (infinite) polynomials, and probability. It is intended for students in the life sciences, business and economics who wish an introduction to the subject. Students planning to continue to Math 233 (Calculus III) should enroll instead in Math 132.

**Prerequisites**

Math 127 or equivalent

**Instructor**

Linda Burns
lburns@math.wustl.edu

Room 108C, Cupples I
(314) 935-6760

**Lectures**

Monday-Wednesday-Friday 10-11am
Duncker 101

**Office hours**

Monday and Wednesday 11:15 – 12:15 pm (or by appointment)
Room 108C, Cupples I

**Teaching Assistant**

Timothy Chumley
tim@math.wustl.edu

TA’s Office Hours: Wednesday 12:00-2:00, Lopata 323

**TA Discussion Hours**

Section A: 9-10 Thursdays, Eads 102

Section B: 10-11, Thursdays, Eads 102

Section C: 12-1, Thursdays, January Hall 10

**Textbook**

Larry Goldstein et al, "Calculus and its Applications,” 12th Edition, Pearson

Prentice Hall

**Expectations**

 Meeting or surpassing the following expectations will best enable you to succeed in this course:

1) Attend all lectures and discussion sections;

2) Take careful notes;

3) Read all textbook sections covered;

4) Complete the webwork every week;

5) Prepare for quizzes by studying the previous week’s webwork;

6) Complete all “practice problems” from the text, which will be posted; and

7) Get help when necessary.

**Course Content**

We will cover Chapters 7-12 of the course textbook. We will begin with chapters 8 and 9, followed by chapters 7, 10, 11, and 12. Most, but not all, sections will be covered.

**Webwork**

 Weekly homework assignments will be put up on [Webwork](http://webwork.wustl.edu/webwork2/math128fall2011/) on Monday mornings with the exception of the first week and midterm exam weeks. They will be due on Friday before 9pm. Solutions will be available on Sunday. Missed homework will receive a score of zero, but the lowest two homework scores will be dropped. Webwork will contribute 10% to your final grade.

 You are encouraged to discuss the general method for solving these problems with your fellow students, your TA, or at one of the options available at [Calculus Help](http://wumath.wustl.edu/courses/calculus_help). You are, however, expected to solve the particular problems assigned in the homework by yourself.

 First time Webwork users are encouraged to go through the student links at [Webwork Help](http://www.math.wustl.edu/~blake/wwdocs/). Your username and password will both be your Student ID number at first login. You should change your password after you login the first time.

**Thursday Discussion Sections**

 You are required to attend a discussion section every Thursday. Our teaching assistant for this course, Timothy Chumley, will lead these discussions. There will be a quiz at the beginning of each discussion session (see below). Missed quizzes will receive a score of zero, but the lowest two quiz scores will be dropped.

**Quizzes**

 As previously stated, there will be a quiz at the beginning of each discussion section. Quiz questions will be selected directly from the previous week’s webwork, if any. Otherwise they will be based on lecture material.

 In addition, on at least two randomly selected dates, there will be an Attendance Quiz at the beginning of lecture. These quizzes will not be announced in advance, but they will be very simple, and are intended to encourage and reward consistent and prompt attendance at lecture.

 Your lowest two quiz scores will be dropped. Quizzes will contribute 10% to the final grade.

**Practice Problems**

 Prior to each test, I will post a list of suggested practice problems from the textbook. As you are studying your textbook, you should do these problems at a minimum. You will not hand these in; however, they will help you in preparing for your tests.

**Examinations**

There will be three midterm exams on the following dates. Each will contribute 20% to the final grade.

Midterm #1 (Chapters 8 and 9): February 7 (Tues) 7-9 pm (room tba)

Midterm #2 (Chapter 7): March 6 (Tues) 7-9 pm (room tba)

Midterm #3 (Chapter 10): April 3 (Tues) 7-9 pm (room tba)

 The mandatory and comprehensive Final Exam will be held on Thursday, May 3, 3:30-5:30 pm (room to be announced). This will contribute 20% to the final grade.

 A simple scientific calculator may be used for all quizzes, tests and final exam. A programmable or graphing calculator, or one with the ability to manipulate or simplify expressions, should not be used.

 Your examination room assignment will be available on the day of the exam at [www.math.wustl.edu/seatlookup/](http://www.math.wustl.edu/seatlookup/) There will be no make-up exams. Legitimate excuses for missing an exam (such as verified illness or family emergency) must be approved by Prof. Blake Thornton (blake@math.wustl.edu).

**Grading**

Your final grade will be calculated as follows:

Webwork (best 8 out of 10) 10%

Quizzes (best 13 out of 15) 10%

3 Midterm Exams 60%

Final Exam 20%

Your lowest midterm score will be replaced with your final exam score, if that is to your advantage. Precise ranges for letter grades will be determined at the end of the course. However, receiving more than 90% assures you an A, more than 80% assures you a B, and more than 70% assures a C.

**Changes to the Syllabus**

Changes to the Syllabus, if any, will be posted and announced in lecture.

**Electronic Devices**

All personal electronic devices, such as cell phones, laptops, etc., must be silenced and put away during lecture and discussion sections.