

Course Outline: Math 1850-016, Fall 03

The web page for this course can be found at <http://livetoad.org/>. Please check there frequently for announcements, changes, solutions, and other goodies.

Introduction

Welcome to Calculus! Calculus is the study of dynamic phenomena, of things that change and evolve over time. Calculus introduces two mathematical tools: the derivative, which measures the rate at which something is changing; and the integral, which keeps track of an accumulating quantity. These are inverse to one another, in a very precise sense. This simple, powerful interrelationship is described in the Fundamental Theorem of Calculus. This theorem is indeed fundamental for all applications of Calculus. It is the capstone of our course.

The material in this course is covered in chapters 1–5 of *Calculus*, 5th edition, by James Stewart.

<i>Labor Day</i>	Mon	2 Sep
Exam 1: Alg/Trig review	Tue	3 Sep
Exam 2: Sections 1.1–1.3, 2.1–2.6	Thu	18 Sep
Exam 3: Sections 3.1–3.8	Thu	16 Oct
<i>Last Day to Withdraw</i>	Fri	17 Oct
<i>Fall Break</i>	Mon–Tue	20–21 Oct
<i>Veteran's Day</i>	Tue	11 Nov
Exam 4: Sections 4.1–4.7	Thu	13 Nov
<i>Thanksgiving Break</i>	Wed–Fri	26–28 Nov
Exam 5: Sections 4.10, 5.1–5.5	Tue	9 Dec
Exam 6: All sections listed above	Fri	19 Dec, 8-10am, Dana A

Prerequisites

This course is not very difficult, provided you are comfortable with the prerequisite algebra and trig. We will spend the first day reviewing techniques and concepts from basic algebra and trig. The first exam — in the third class meeting! — will cover this review material. The problems for this exam will be chosen from a list of review problems that are posted on the web: <http://www.utoledo.edu/mathtests/practice.html>. Your score on this first exam should indicate how well you can expect to do in this class.

Office hours

My office hours for this class are Tuesday and Thursday immediately before and immediately after class, in the lobby of Rocket Hall. At these times you can call or stop by without an appointment and I am sure to be there. I am also available at other times, but for these you must make an appointment. Feel free to ask for appointments at other times if you cannot make it to my regular office hours. My office is UH 4080e. The phone number is 419 530 2975. My email address is paul.hewitt at utoledo.edu. If you call me when I am not in my office then you can leave a voice mail message and I will get back to you as soon as I can.

Assignments

There are 19 homework assignments, of 10 problems each. Each problem is worth 1 point. Your best 15 homework scores count toward your final grade. The assignments and their due dates are posted on the class web site. The assignments are always due at the *beginning* of class on the due date. I will not accept any late homework problems, under any circumstances. If you are late to class, if you forget your assignment, or if you miss class for any reason then the homework score for that day will be one of the 4 you drop. If you are in the habit of missing classes and assignments regularly then probably you will fail. Making up missed assignments will not help. So, let me emphasize this point: I will never accept late homework assignments under any circumstances. Don't ask.

Your solutions must be neat and show all work. If you do not show your work then you will not receive credit for your solution. When you turn in your assignment fold your papers lengthwise, and write on the outside the following information:

your name, Math 1850-016, Fall 03, assignment number, due date

Exams

We will have an algebra/trig review exam, worth 50 points; 4 chapter exams, each worth 50 points; and a comprehensive final exam, worth 100 points. You may not use a calculator of any kind on any of the exams. The exam questions will be taken directly from the homework assignments, except for the review exam, whose questions will be taken from the algebra-trig review problems posted on the web: <http://www.utoledo.edu/mathtests/practice.html>. Naturally, I will change the numbers, functions, and parameters in the questions.

I will give make-up exams only in case of a documented emergency, such as illness or a funeral. If you are sick the day of the exam then you must call or email that same day if you expect to be able to make up the exam. Otherwise you must arrange for a make-up exam ahead of time. If I am not in my office then you can leave a voice mail message. If you fail to show up for an exam and do not contact me about it until afterwards then you will not be able to make up that exam — you will get a 0 for that exam.

Grades

Your final grade will be determined from the distribution of total points earned. I will post the class histogram, and this should give you a clear idea of where you stand. Historically 85% of total points earns an A; 75% earns a B; and 65% earns a C. However these are just historical observations, not rigid targets.

If you want me to post your grades under a nickname then bring me a 3×5 card with your name, an email address, and the nickname you want to use — preferably something not obvious!

If you stop attending class then I will give you an IW grade. There are two points during the semester for submitting IW grades: the 4th and 10th weeks. After the 10th week an IW grade is impossible, so if you stop attending after this point then you will get an F.