

Math 2: Calculus for Managerial, Life and Social Sciences

Hartnell College, spring 2009

Syllabus

Instructor: Leticia Contreras

Office: CAB 287

Phone: 831.770.7053

Email: lcontreras@hartnell.edu

Website: www.hartnell.edu/faculty/lcontreras

Class Meets: Monday & Wednesday, 10:00 -11:50 AM & Saturday 3/14, 9 AM -2 PM in CAB 277

Office Hours:

Monday & Wednesday 9:00-9:50 AM

Tuesday & Thursday 8:30-9:20 AM

Prerequisites: Math 123: Intermediate Algebra or equivalent with a C or better.

Required Materials

Larson, Brief Calculus: An Applied Approach, 8th Edition & Graphing calculator

Course Description

This course covers linear and quadratic models, introduction to limits, the derivative and its applications, the integral and its applications, methods of integration, and differential equations. Applications from life, management, and social sciences are considered throughout the course. This course is primarily for students in business, social sciences, and biological sciences.

Course Objectives

The student will

1. analyze graphs of functions.
2. evaluate limits and prove continuity at a point.
3. analyze exponential and logarithmic functions through the use of derivatives.
4. use the limit definition of a derivative to calculate derivatives.
5. apply the appropriate techniques of differentiation to calculate derivatives.
6. formulate the equation of a tangent line for a function.
7. apply derivatives to applications that include related rates, maxima and minima.
8. calculate definite derivatives using Riemann sums.
9. determine and apply appropriate methods of integration.
10. analyze problems, apply the appropriate strategies, and judge the reasonableness of the results in the following types of problems: differentiation, optimization, integration, applications of integration, graphs of functions, exponential growth and decay.
11. supplement manual problem solving with appropriate use of technology.

Services for students with disabilities

In compliance with equal access laws, I am available to discuss appropriate academic accommodations that you may require as a student with a disability. Request for academic accommodations need to be made during the first week of the semester (except under unusual circumstances) so arrangements can be made. Students are encouraged to register with Disabled Students Programs and Services (DSP&S) for disability verification and for determination of reasonable academic accommodations.

Grading Scale

90%-100%	A
80%- 89%	B
70%- 79%	C
60%- 69%	D
below 59%	F

You will be graded as follows:

Homework	25 %
Quizzes & Class Activities	20 %
Exams	30 %
Comprehensive Final Exam	25 %

Homework

Homework is your opportunity to practice what you have learned during the lectures and the reading. Only after you practice, you will truly understand the concepts. It is important that you do your work neatly so that you are proud of what you are turning in. *Homework assigned throughout the week will be due on Monday of the following week.* Late homework will not be accepted, so be sure to turn in your homework on or before the due date. Your homework will be graded based on completeness only. Since I will mostly assign odd numbered problems, it is your responsibility to check that your answers are correct. Your homework assignments need to include: the problem (or a summary of important facts of word problems), your work and the final answer (boxed whenever appropriate). Each homework section is worth 4 points.

Quizzes & Class Activities

It has been shown that students retain more information when they are actively engaged in their own learning. In this class, you will learn to think critically and work together in small groups to answer questions and work on group activities and quizzes. Some of your quizzes will be taken in groups, some in pairs and some individually. For the group and pair quizzes, each group member must work together until everyone in the group understands and agrees on the answers. You must staple your group quizzes when you turn them in and I will randomly pick one quiz to grade and each member of the group will earn that grade. Attendance and participation are very important factors that will determine your success in this class. *You must be present to participate in group activities and explorations. Because of the nature of these activities, you may not make up the work in case you are absent.* However, I will drop the lowest quiz score or missed quiz. Additional activities outside of class may be completed individually or by working with peers. In either case, each student is responsible for turning in his or her own work.

Exams

There will be three exams plus the comprehensive final exam. Make up exams after the exam date will not be given; therefore you must plan to attend class for all exam dates. However, if you know ahead of time you will not be able to attend class on an exam day; you may make arrangements with me so that you can take an exam BEFORE your absence.

Exam Dates: Saturday 3/7, Friday 4/2, Wednesday 5/6 & Final Wednesday 6/3

Attendance

Everything we do in this course builds upon the previous concepts. Be sure to attend every class meeting. If you miss even one day, you will miss a great amount of crucial information that will affect you in the lessons to come. Due to the late start of two weeks, we are required to make up 5 hours in order to meet the minimum number of hours required for a 4 unit class. In general, please let me know if you are going to be absent in advance. Also, be sure to make up homework and reading assignments as soon as possible. You will find all assignments posted on the website:

www.hartnell.edu/faculty/lcontreras

Also keep in mind that according to Hartnell College's attendance policy "*Absences in excess of two weeks (consecutive or non-consecutive) may result in the student being dropped. It is the responsibility of the student to drop from courses they do not wish to attend. DO NOT assume instructors will submit the drop for you*". In other words, Instructors have the right to drop you if you miss more than two weeks, but are not responsible for dropping students who chose not to continue with the class. If you decide to drop the class, be sure to fill out a drop card with Admissions and Records or by using **PAWS** online to avoid receiving a grade of F.

Resources:

The MESA (Math, Engineering, Science Achievement) Program is here to support students majoring in fields that require Calculus. See Shannon McCann in Merrill 22A to pick up an application & visit the MESA Room in Merrill 30 and the Rotarium for FREE tutorial in your math and science courses. The Math Lab & the Tutoring Center are located in the ANNEX building (old library). They provide free drop in and individual math tutoring services in English and Spanish. Form study groups to do homework, study for exams and attend the Math Lab together.

Important Dates:

- Monday 2/9: First day of this class
- Monday 2/16: Washington Holiday
- Tuesday 3/31: Cesar Chavez Holiday
- 4/6-4/10: Spring Break
- Friday 5/8: Last day to drop with a W
- Monday 5/25: Memorial Day Holiday
- Tuesday 6/2: Study Session 2:30-4:00
- Wednesday 6/3: Final Exam 11:30 -2:30