Calculus for Social and Life Sciences

http://www.math.lamar.edu/faculty/maesumi/list.html

Coordinates: MATH 2376.01, TR 2-3:15, L114, August 23 - December 15, 2010.

Disclaimer: Dates, number of tests, and other information are subject to change. Attend all classes, check your emails, and course web site, to get the latest information.

Instructor: Dr. Maesumi, Ph.D., Lucas 206, main contact form: maesumi@gmail.com, (phone 8766 is for last minute check, follow up with an email, phone and other email addresses are not monitored regularly).

Text: Calculus: For Business, Economics, and the Social and Life Sciences
Authors: Hoffmann, Laurence D.; Bradley, Gerald
Edition: 7
Publication date: May 2000
Publisher: McGraw-Hill
ISBN-10 is 0072437650
ISBN-13 is 9780072437652

Office Hours: MWF 11:15-12:00, 1:30-2:30. I am usually on campus 8:30-2:30. Feel free to drop in. If door is closed knock and wait 30 seconds. If you are coming to office it may be better if you bring your notebook and other supporting material. If you are sending e-mail include your full name and use a heading that makes your e-mail stand out, e.g. Calculus 2376 Lamar. Keep a copy and e-mail it again if you do not get a reply within one business day. The preferred contact form is through email given above, however if you want to leave a message on phone make it brief, speak clearly, and resend same information by email.

Class Format: I will record the lectures and post them to above web site. Fell free to ask your questions during lecture.
You can replay the video to understand the lecture better.
You can review the video with a classmate or instructor.
You can pause the video, work a problem yourself, and compare with the presented solution.
You can view the video at your own place, time, and speed.
You get access to animation, graphing and useful links.
You get the most complete lecture notes. Now you cannot be absent.

Tests and Grading: Tentatively the tests are planned for Tuesday September 21, Thursday October 21, and Tuesday December 7. Solving homework problems on board counts as one test. Handwriting, presentation, speed, and accuracy are important parts of each test. All tests count equally toward your final grade. Tests are sectional and focus mostly on the recent items. Certain topics will be present throughout the semester. Tests should be returned to me after you view it. Resolve grading issues within one week of tests. Tests will cover class material, all assigned homework, examples in text, and occasionally other problems similar to the ones in the text. Final grades are given according to $A \geq 90 > B \geq 80 > C \geq 70 > D \geq 60 > F$ or better.

Course Evaluation: Students who complete the course evaluation and return the completion form by the assigned deadline will get 5 point added to their lowest test grade.

Tutoring: Free tutoring is available in L209.

Absence, Grade Appeals: If you are absent from an exam let me know as soon as possible and be prepared to show proof of emergency. If you have an issue with your grade let me know as soon as possible. At the end of semester you have two weeks to request an appeal of your grade.

Calculator Policy: Only basic scientific calculators (typically costing less than $20) are allowed on exams. Advanced graphic calculators (e.g. high-end TI), wireless devices, and computers are not allowed on tests. You need to purchase and learn your calculator early on.

Students Learning Outcomes and Objectives:
Students who successfully complete this course:
(a) Understand limits and calculate the limit of basic functions, using algebraic, graphical, and numeric methods.
(b) Understand the concept of tangent lines, and be able to find the slope of a tangent line to basic functions.
(c) Understand the concept of velocity, acceleration and rates of change of physical quantities as it applies to biology.
(d) Understand limits at infinity, infinite limits, and various types of asymptotes.
(e) Understand rules and techniques of differentiation (linearity, product, quotient, power, chain, implicit).
(f) Understand the differentiation formulas for exponential and logarithmic functions.
(g) Show basic competency in basic graphing, related rates, and optimization.
(h) Understand the connection between area calculation and definite integrals.
(i) Understand the connection between differentiation and integration, and the fundamental theorem of calculus.