Greensheet

Calculus I (Math 30), Spring 2009, San Jose State University
MacQuarrie Hall 423, MW 10:30-12 and 12-1:30

Instructor: Plamen Koev
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Office hours: MW 2-4:30pm
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Course web page: http://www.math.sjsu.edu/~koev

Catalog Description: Introduction to Calculus including limits, continuity, differentiation, applications and introduction to integration. Graphical, algebraic and numerical methods of solving problems.

Prerequisite: Satisfactory score on the Mathematics Placement Exam; satisfaction of the ELM requirement.

Textbook: Calculus: Early Transcendentals, by James Stewart, Thomson/Brooks/Cole, 6th. Ed.

Course Objectives: To learn the concepts and techniques of differential calculus and use them in solving applied problems. To study limits, continuity, differentiation and applications of the derivative.

Outcome Assessment: Two exams: March 18 and May 4, worth 20% each. A comprehensive final exam worth 60%. You must plan to take the exams at their scheduled times. Exceptions are rarely granted and only in documented circumstances in accordance with University policy.

Homework: Homework will be assigned and graded. People with more than 60% homework score automatically get a "plus" added to their final grade.

Course Schedule:

Chapter 1 Sec. 1 – 6   Review (Sec. 1.4 optional) (2 hours)

Chapter 2   Sec. 1 – 8   The tangent and velocity problems, the limit of a function, limit laws, the definition of the limit, continuity, limits at infinity, infinite limits, horizontal and vertical asymptotes, tangent lines, velocity and other rates of change, the definition of the derivative. (13 hours)

Chapter 3   Sec. 1 – 11   Derivatives of polynomials, exponential functions, trigonometric functions, logarithmic functions, and hyperbolic functions. The product rule, quotient rule and chain rule. Implicit differentiation, higher order derivatives, related rates, differentials and linear approximations. (14 hours)

Chapter 4   Sec. 1 –5 Maximum and minimum values, the Mean Value Theorem, curve sketching, indeterminate forms, and L'Hopital's Rule.   Sec. 7   Optimization problems. Sec. 8,9 Newton's method, an introduction to antidifferention. (12 hours)

STUDENTS WHO INTEND TO USE THIS COURSE TO SATSFY THE MATHEMATICAL REQUIREMENT FOR GENERAL EDUCATION MUST EARN A C OR BETTER.

Academic integrity. Your commitment to learning (as shown by your enrollment at SJSU) and the university's Academic Integrity Policy require you to be honest in all of your academic course work. Faculty are required to report all infractions to the Office of Judicial Affairs. (See: http://www2.sjsu.edu/senate/S04-12.htm)

Disabilities. If you need course adaptations or accommodations due to a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with the Disability Resources Center to establish a record of their disability.

Tutoring. Peer tutoring in calculus is available to all SJSU students, free of charge, at the Learning Assistance Resource Center, in Room 600 of the Student Services Center. See or call x4-2587 for more information.