

CATALOG DESCRIPTION: Introduction to the techniques of differentiation and integration. Includes the chain rule, fundamental theorem and maximizing/minimizing applications. Graphing calculators and mathematical software tools are used extensively. Prerequisite: MATH 130 or a strong background in algebra and trigonometry.

COURSE OBJECTIVES: This course serves the needs of those in the areas of science, engineering, and business who need to use the ideas and techniques of calculus in their work. Enough theory is included to provide an adequate base for further study in mathematics.

INSTRUCTOR: Lloyd Best (Lbest@puc.edu). Phone: office/965-6591; home/942-9680; Office fax: 965-7135.

OFFICE: CSH 238C. **HOURS:** Mon: 9-10, 2-3; Tues: 10-12, 2-3; Wed: 2-5; Thurs: 11-12; Fri: 8-9.
I am happy to help you during my office hours, by appointment, or at other times when I am free.

TEXT AND REFERENCES: Hughes-Hallett, *Calculus*, third edition, Wiley, 2002.
Other texts are available for reference in the Math Department Reading Area in Chan Shun Hall.

USE OF TECHNOLOGY: A graphing calculator is essential. For graphing and symbolic work, software such as *Derive*, *Graphmatica*, and *Winplot* will be available in the computer lab in CSH 232.

ATTENDANCE: Previous students have discovered that missing three or more class presentations makes it very difficult to pass the course. Some explanations presented in class will not be found in the text. In addition, announcements made during classes have the same force as statements in this syllabus.

STUDYING WITH OTHERS: You are encouraged to study with other classmates. Comparing ideas and solutions helps to clarify understandings. Be sure that your written assignments reflect your own understanding and not just what someone else figured out. You probably don't really "know" it if you can't write it out yourself.

LEARNING DIFFERENCES: PUC strives to accommodate students with documented learning differences. If you have a learning disability, or think you might have one, please check with the Counseling Center. They can provide a diagnosis and will work with your instructor to accommodate your situation.

GRADING: The final grade will be based on Homework (20%) and Tests (80%).

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| A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- |
| 92% | 88% | 84% | 80% | 75% | 70% | 65% | 60% | 57% | 53% | 50% |

HOMEWORK: Please show your work. Assignments will be announced in class. Late work is not accepted unless delayed by illness or other emergency. Any late work must be submitted directly to me the day you return to class. If approved, the work will either be graded or averaged with other homework scores.

Preparation for doing the homework problems will require more than careful attention and participation in class. Before working on the assignment you will need to carefully read the textbook and rework the textbook examples. Many students find it very useful to study with other classmates. Tutors from the Learning Center conduct evening help sessions to answer questions and give suggestions. Hours and locations for help sessions will be announced.

TESTS: Tests must be taken at the scheduled time (see schedule below). Only tests which are missed due to illness or emergency circumstances may be made up. If you know in advance that you must miss a test, you are required to notify me in advance. If you miss a test for emergency reasons, you must notify me as soon as possible.

ACADEMIC INTEGRITY: Homework which matches answers provided in the book, by the instructor, or from another student's paper will be given no credit. All test work must be completely your own. A student involved in cheating (or assisting someone in cheating) on a test should expect to be dismissed from the course with a failing grade. See PUC's *Code of Academic Integrity* (page 229 of the *General Catalog*) for details.