

Syllabus: **MAT 242** CALCULUS II

Goals: To learn the fundamental theorem of calculus, some techniques for applying the concepts embodied in it, and to transfer knowledge gained to formulating and solving problems. The language of mathematics is powerful; a major thrust of this course is to help you build your ability to communicate mathematical ideas.

Course Outline

- 1 Derivatives and anti-derivatives
- 2 The definite integral
- 3 The Fundamental Theorem of Calculus
- 4 Applications of both definite and indefinite integration
- 5 Modeling with differential equations
- 6 Introduction to infinite series

Homework: For every lesson, problems will be assigned that you will either discuss or hand in. Class will proceed on the assumption that you have done and understood these problems. You are responsible for asking questions, and these should be based on your own serious efforts to solve the problems. Visit your professor in office hours if you find you have additional questions not fully answered during class. Credit for valuable contributions to class discussion will be awarded; such contributions include useful questions as well as other discussion.

Regular and on-time attendance in this class is imperative because much of your learning will develop through class activities and discourse.

All assignments must be submitted on time.

Quizzes: There will be frequent quizzes, often in the first 10 minutes of class. Missed quizzes cannot be made up. Your 2 lowest quiz grades will be dropped at the end of the semester.

Gateway quizzes: There will be 3 'gateway quizzes' in the semester on which you are required to score at least 85%. These are intended to establish proficiency in the basic skills of the course.

Exams: There will be two hour-exams and a Final Exam.

Excuses for missed exams will not be accepted unless accompanied by a doctor's note or similar official document.

Grading:

Points will be assigned on the following basis:

Exam 1	150
Exam 2	150
Homework and other written assignments	200
Gateway Quizzes	100
Quizzes and class participation	150
Final exam	250
<i>Total</i>	<i>1000</i>

Academic integrity: No collaboration is permitted on quizzes and examinations. Please refer to UVI's student handbook for the policy on academic honesty, and remember that no grade is worth the sacrifice of your academic reputation.