Syllabus for UWXMA221 Calculus 1

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

Calculus I is based on the study of real valued functions of a single variable. The course topics include limits and continuity, derivatives, antiderivatives, definite integrals and Riemann sums. Applications of differentiation and integration are also covered.

Prerequisite(s)

Pre-Calculus or College Algebra and Trigonometry with grade(s) of C or better or placement.

Course Outcomes

Upon completing this course, you will be able to do the following:

1. Communicate problem solutions, interpretations, and ideas and techniques of calculus in clear and well-organized written form, including the proper use of notation.
2. Understand the concepts of limit and continuity and compute limits of functions.
3. Understand the definition of the derivative and interpret derivative graphically as well as an instantaneous rate of change.
4. Use differentiation rules to compute derivatives of polynomial, rational, exponential, and trigonometric functions as well as their inverses, compositions, and arithmetic combinations.
5. Apply derivatives to curve sketching, optimization problems and computing limits.
6. Understand the definition and fundamental idea of the definite integral.
7. Understand the fundamental theorem of calculus and use it to calculate definite integrals.
8. Find anti-derivatives of standard elementary functions.
9. Evaluate anti-derivatives using the method of substitution.
10. Apply definite integrals to compute areas and volumes.

Course Requirements/Components

Chapter Discussions

There will be 6 chapter discussions. You will need to post your solution to one of the chapter's problems, and respond to a post of at least one other student.

Online Homework

There will be a MyLab Math assignment for each textbook section covered in the course. There will be a total of 40 homework assignments.

Online Quizzes

There will be 7 MyLab Math quizzes, one for each textbook chapter covered in the course.

Unit Exams 1-4

Exam 1-4 will be MyLab Math exams proctored using Proctorio proctoring service.

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	93% - 100%
A-	90% - 92%
B+	87% - 89%
B	83% - 86%
B-	80% - 82%
C+	77% - 79%
C	73% - 76%
C-	70% - 72%
D+	67% - 69%
D	60% - 66%
F	59% and under

Assignments	Weight
Chapter Discussions	8%
Online Homework	26.8%
Online Quizzes	11.7%
Unit Exams 1-4	53.5%