

**Instructor:** Dr. Tom Caplinger

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**Office hours:** 9:00-10:00am MTWRF and *by appointment*

**Text:** *Calculus, Early Transcendental Functions*, 4<sup>th</sup> ed, by Larson et al, Houghton Mifflin, 2007

**Course description:**

This course is an introduction to the concepts, formalism and applications of derivatives and integrals. Elementary transcendental functions are used throughout. Specific topics include limits, the derivative, applications of differentiation, the definite integral, and the Fundamental Theorem of Calculus.

**Prerequisites:** Students will need a background in algebra, trigonometry, and exponential and logarithmic functions.

**Requirements:**

In addition to quizzes, four in-class tests, and a comprehensive final exam, students will complete several projects. Each of these is a written report of the solution to a problem. Students may work in groups to solve the problem, but students will write their own report. Grading of the projects will be based on accuracy, presentation and writing.

**Course content:**

August 22	Chapter 1	
August 24 – September 14	Chapter 2	Test 1 – September 14
Hand out Project 1 – September 5		No class September 3
Project 1 due – September 12		
September 17 – October 8	Chapter 3	Test 2 – October 8
Hand out Project 2 – September 26		
Project 2 due – October 3		
October 10- October 31	Chapter 4	Test 3 – October 31
Hand out Project 3 – October 22		No class October 15, 16
Project 3 due – October 29		
November 1 – December 5	5.1 – 5.5	Test 4 – December 5
Hand out Project 4 – November 19		No Class November 21 - 23
Project 4 due – November 28		
December 10	Final Exam	1:00 pm

**Grading:**

Four in-class tests	50%
Homework	10%
Quizzes	10%
Projects	10%
Final Exam (comprehensive)	20%

If the final exam grade is higher than that any of the in-class tests, the final exam grade will replace that lowest in-class test grade. Course grades will be assigned on averages in the following ranges:

94 – 100	A	73 – 76	C
90 – 93	A-	70 – 72	C-
87 – 89	B+	67 – 69	D+
83 – 86	B	60 – 66	D
80 – 82	B-	0 – 59	F
77 – 79	C+		