

Instructor: Dr. Tom Caplinger

Office: 316 Ohlendorf

Phone: x3722

e-mail: caplingert@rhodes.edu

Office hours: 9:00 – 10:00 MTWRF *and by appointment*

Text: *Calculus, Early Transcendental Functions*, 4th ed., by Larson, Hostetler and Edwards, Houghton Mifflin, 2007

Course description:

This course is an introduction to (1) formal and numerical techniques of integration, (2) Taylor's Theorem, sequences, series, power series, and their applications, (3) applications of integration and series to solving first-order differential equations, and (4) applications of integration to calculate area, length, volume, probability, work, centroids and fluid pressure.

Prerequisite: Math 121

Course requirements:

In addition to quizzes, four in-class tests, and a comprehensive final exam, students will complete Problem Sets on a regular basis. Students may work in groups to solve these problems, but each student will write his/her own report of the solutions. Grading of the Problem Sets will be based on accuracy and presentation.

Course content:

August 22 – September 14	Chapter 5, 6.3 -6.3, 7.1 <i>No class September 3</i>	Test 1 – September 14
September 17 – October 5	7.2 – 7.6, 8.1 – 8.3	Test 2 – October 5
October 8 – October 30	8.4 – 8.8, 9.1 – 9.4	Test 3 – October 30
October 31 – November 27	9.5 -9.10 <i>Thanksgiving, November 21 - 15</i>	Test 4 – November 27
November 28 – December 7	10.2 – 10.4	
December 8	Final Exam	5:30 pm

Grading:

Four tests	50%
Quizzes	15%
Problem Sets	15%
Final Exam (comprehensive)	20%

If the final exam grade is higher than that of any of the tests, the final exam grade will replace that lowest 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+		