**Instructor:** Dr. Tom Caplinger

**Office:** 316 Ohlendorf

**Phone:** x3722

**e-mail:** caplingert@roldes.edu

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


**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, arc length, volume, probability, work, centroids and fluid pressure.

**Prerequisite:** Math 121.

**Course requirements:**
In addition to fours in-class tests, quizzes, and a comprehensive final exam, students will complete Problem Sets on a regular basis. Students may work in groups to solve the problems in these homework assignments, 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:

January 9 – February 6  Chapter 5, 6.1 – 6.3, 7.1  Test 1 – February 6

February 7 – February 27  7.2 – 7.6, 8.1 – 8.3  Test 2 – February 27

February 28 – March 27  8.4 – 8.8, 9.1 – 9.4  Test 3 – March 27

Spring Break March 3 – 7
Easter recess, March 20, 21

March 28 – April 23  9.5 – 9.10, 10.1 – 10.4  Test 4 – April 23

April 24  Review

April 30  Final Exam  8:30 am

Grading:

Four tests  52%
Quizzes  12%
Problem Sets  16%
Final exam (comprehensive)  20%

If the final exam grade is higher that 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:

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