# Calculus and Analytic Geometry MATH 030, CRN: 10655 MW 6:00 – 7:50pm

Mr. Scott Immel Room 1528

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**COURSE DESCRIPTION:** MATH 030 covers differential and integral calculus of a single variable. Topics include limits, continuity, derivatives of algebraic and transcendental functions and their applications, integrals and their applications, and plane analytic geometry.

**PREREQUISITE:** A grade of "C" or better in MATH 104.

Course Advisory: SCC minimum English standard.

### STUDENT LEARNING OUTCOMES

- Apply derivative concepts to solve a variety of word problems (both familiar and unfamiliar) and corroborate their solutions with practical reasoning.
- Demonstrate understanding of the geometric relationship between a function, its first derivative and higher order derivatives.

**MATH PROGRAM OUTCOMES:** Students will be able to solve problems by applying appropriate math concepts and ideas; and effectively communicate the solution(s) of these problems.

#### **MATERIALS**

- 1. Applied Calculus (5th edition) by Berresford and Rockett
- 2. A scientific calculator
- 3. binder and graph paper

### Grading

6 Quizzes (Best 5)	25% - 50 points each
2 Midterms	30% - 150 points each
10 MAC Assignments (In Class)	10% - 10 points each
1 Final	35% - 350 points
Total	100% - 1000 points

## **Grading Scale**

Grades will be calculated by your percentage of points earned. Letter grades will be determined according to the following scale:

at least 90% A, 80% - 89 B, 70% - 79% C, 60% - 69% D, less than 60% F.

#### **EXPECTATIONS**

- Calculus students will <u>come to class prepared</u>. For every hour in class, <u>at least two hours</u> of studying outside of class are required.
- Calculus students are expected to <u>read, write, and think critically</u>.
- Students will participate in class and be engaged with the class activities.
- Students will <u>attend class regularly</u>. More than three absences will affect your grade and may cause you to be dropped from the course.
- Students will <u>behave appropriately</u> for a college environment. Excessive talking will not be tolerated. Cell phones must be on silent mode or turned off during class. NO TEXTING DURING CLASS.
- Understand the definitions and consequences of 'Academic Dishonesty'. Refer to the Solano College catalog online.
- You must call or e-mail me *before class starts* if you have an emergency on the day of a test.