

*Monday, October 1*

Reading: *Anton, Bivens & Davis* Section 3.1

### **Class 13: Tangents, Average and Instantaneous Rates Of Change**

We shall begin our study of the derivative by looking at the question of the difference between average rates of change and instantaneous rates of change and relating them to graphical features of curves, tangent lines and secants.

**Homework 13:** *Anton, Bivens & Davis* §3.1: 1, 2, 3, 4, 7, 8, 13, 20

*Wednesday, October 3*

Reading: *Anton, Bivens & Davis* Section 3.2

### **Class 14: Introducing The Derivative**

We begin to formally define the derivative function using the limit of difference quotients and introduce the concept of differentiability and relate it to continuity.

**Homework 14:** *Anton, Bivens & Davis* §3.2: 1, 2, 3, 4, 9, 10, 16, 17

*Thursday, October 4*

### **Lab : Limits, Differentiability and Continuity**

DEADLINE TO PASS FIRST GATEWAY EXPIRES TODAY. You must pass either Exponents or Equations/Inequalities. If you pass both that is equivalent to 10 bonus HW points.

**Homework 13 & 14 Due in the Math 110 Course Box by 5:00 pm Thursday October 4**

*Friday, October 5*

Reading: *Anton, Bivens & Davis* Section 3.3

### **Class 15: The Derivative Function**

We shall make our exploration of the derivative function more systematic.

**Homework 15:** *Anton, Bivens & Davis* §3.2: 23, 25, 26, 27, 28, 35, 39

**Quiz 4:** Take Home Quiz on Differentiation.