Mr. Sanders Room K109

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# **Course Description**

AP Calculus AB primarily develops students' understanding of the major concepts of calculus. It gives experience with its methods and applications. The course presents concepts, results, and problems in graphical, geometric, numeric, analytical, and verbal forms. The course weaves together limits, derivatives, integrals, applications, approximations, and modeling. AP Calculus AB students study the topics covered in a typical college Calculus I course.

#### **Textbook**

Calculus of a Single Variable, 10<sup>th</sup> Ed. by Larson, Edwards (This is the thinner of the two calculus texts here.)

#### **Materials Needed:**

- 1. Calculator (Recommended TI-Nspire CX or CAS). It is *wise* to use the same one that you will use on AP exam.
- 2. Loose-leaf notebook paper, a small ring binder, & graphing paper. You must have a *dedicated* math notebook. No spiral notebooks or their spiral chads, please.
- 3. #2 Pencils (preferably mechanical), Color Pencils/Pens/Markers, & Erasers.

#### Semester 1

Functions and Graphs
Limits and Continuity
Concept of Derivative
Local Linearity and Differentiability
Computation of Derivatives
Applications of Derivatives
Antiderivatives

### Semester 2

Antiderivatives
Riemann Sums
Fundamental Theorem of Calculus
Functions Defined by Integrals
Techniques of Antidifferentiation
Numerical Approximations
Differential Equations
Slope Fields
Area and Volume
Review for AP Exam
Monday, May 13<sup>th</sup>

# Grading

50%--Major Grades: Tests

50%--Daily Grades: Quizzes, Projects, HW, etc.

Progressive testing. No retesting.

Late work: One day – 85 max; Two days – 70 max; Three days – 55

max; Four days - no credit. All this is per FBISD policy.

### **Classroom Rules:**

• Be in class on time AND stay in class.

- Be prepared for class. (awake, notebook, pencil, calculator, and assignments)
- Be on task. (doing assigned work)
- No cell phone.

#### Contact

Conference Period: 2nd

Room: K109

Phone: 281-634-7720

E-mail: john.sanders@fortbendisd.com

Tutorial: Tuesday afternoon; Thursday mornings & afternoons; and also by appointment.

### **Procedures**

Expected behavior is discussed the first day of class. Additional procedures as required.

# Make-up Policy

Make-up work is the student's responsibility. All tests and quizzes will be made up in tutorials. When you return to class, you are responsible for all work assigned prior to you missing class.

### Website & Schoology

Please visit both for pertinent information.

The official site for all assignments is Schoology though most of those assignments will be completed and submitted in AP Classroom.

Please have your parents or guardians look over this with you.

You have better things to do your first year of college than to pay big money to retake this course. So please make a serious effort, for your own sake.