

AP Calculus BC

Mr. Sanders
Room K109

john.sanders@fortbendisd.com

Course Description

AP Calculus BC 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, sequences and series, applications, approximations, and modeling. AP Calculus BC students study the topics covered in a typical college Calculus I & II courses. Students can get credit for both semesters or for just Calculus I. The BC course is the prerequisite for Multivariable Calculus, also known as Calculus 3. Some colleges offer a credit exam for this course which has been at RPHS for 4 years now.

Textbook

Calculus, 10th Ed., AP Edition by Larson, Edwards (It is the thicker of the two calculus texts here.)

Materials Needed:

1. Calculator (Recommended TI N-SPIRE 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 & Differentiability
Computation of Derivatives
Applications of Derivatives
Antiderivatives
Riemann Sums
Fundamental Theorem of Calculus
Functions Defined by Integrals
Techniques of Antidifferentiation
Numerical Approximations
Differential Equations
Slope Fields & Euler's Method

Semester 2

Area & Volume
Definite Integral as Accumulator
Integration Techniques
Logistic Growth
Parametric Functions
Polar Functions
Vectors
Converge & Diverge
Taylor Polynomials
Power Series
Review for AP Exam:
Monday, May 13th

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. This is all 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. Not even a little bit. Seriously.

Contact

Conference Period: 2nd

Room: K109

Phone: 281-634-7720

E-mail: john.sanders@fortbendis.com

Tutorial: Tuesday afternoon; Thursday morning & afternoon; 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 although 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.