

# AP Calculus AB

Bartow High School, The International Baccalaureate School, and Summerlin Academy  
Peggy Frisbie, 2009-2010

## SYLLABUS

**COURSE DESCRIPTION:** This course prepares students to take the AP Calculus AB examination. The major topics are limits, differentiation, and integration. In addition, substantial time will be devoted in the spring to review for both that exam (for all students in the course) and the IB Mathematics SL exam (for IB students only). Aside from two IB-specific assignments with variations for AP and the review in the spring, the classes will be taught identically.

**PREREQUISITES:** Precalculus

**COURSE OBJECTIVES:** My goals for this class are to help you gain a good understanding of calculus and to prepare you to excel on the Advanced Placement Calculus AB exam and, if applicable, the IB Mathematics SL exam, both in May.

## COURSE OUTLINE:

<i>Topic</i>	<i>Approximate time frame</i>
Review of parent graphs, pretest	less than one week
Limits and continuity	four weeks
Derivatives	seven weeks
Applications of derivatives	four weeks
The definite integral	five weeks
First semester exam	one week
Differential equations and mathematical modeling	four weeks
Applications of definite integrals	two weeks
Review for exams	five weeks

## COURSE REQUIREMENTS AND EVALUATION:

- I. Unit tests, generally 100 points each; the units are listed above
- II. Quizzes, usually one or two per unit, generally 40 to 60 points each
- III. Homework, most days, 10 points per assignment
- IV. AP free response quizzes, 20 points each
- V. IB portfolio assignments/AP extended response worksheets (depending upon the program in which you are enrolled), one in each of the first two quarters, 100 points each
- VI. Review quizzes, weekly during exam review at the end of the year, 50 points each

I encourage you to always be aware of how you are doing in the course. I will be posting grades anonymously by the last three digits of your student ID number each week starting after we have some grades. You can also check your grades online.

## TEXTBOOKS:

Finney, Ross L., Franklin D. Demana, Bert K. Waits, and Daniel Kennedy. *Calculus: Graphical, Numerical, Algebraic*. Upper Saddle River, New Jersey, U. S. A.: Pearson Education, Inc., publishing as Prentice Hall, 2003.

Lifshitz, Maxine, with Martha Green. *Amsco's AP Calculus AB/BC: Preparing for the Advanced Placement Examinations*. New York, U. S. A.: Amsco School Publications, Inc., 2004.