

ADVANCED PLACEMENT CALCULUS AB & BC
GRADES 10-12
(2 Semesters - Successful completion of
Pre-Calculus or Honors Pre-Calculus)

COURSE OVERVIEW:

These classes are based upon the Advanced Placement Calculus syllabus published by the College Board. AB Calculus is roughly the equivalent of one semester of college calculus. BC Calculus is roughly the equivalent of two semesters of college calculus. Successful completion of the Advanced Placement test can result in one or two semesters of credit from most colleges and universities.

UNITS OF INSTRUCTION:

These are determined by the College Board. See one of the Calculus teachers for a current syllabus.

STUDENT OUTCOMES:

1. An understanding of limit is central to understanding Calculus. Students will become familiar with limits and how they are used in Calculus.
 2. Students will analyze ideas algebraically, graphically, and numerically and understand the connections between all three methods.
 3. Students will use a graphing calculator to assist with solving and understanding problems in Calculus.
- This course addresses the following state standards: 6A, 6B, 6C, 6D, 7A, 7B, 7C, 8A, 8B, 8C, 8D, 9A, 9B, 9C, 9D.

MAJOR LEARNING EXPERIENCES TO ACHIEVE OUTCOMES:

1. Daily homework.
2. Weekly problem sets. Students are given a set of problems that are turned in and graded each week.
3. Quizzes – usually given at least three times per week.
4. Unit tests – given at the end of each unit.
5. Final exams.
6. Use appropriate technology (graphing calculator, computer) as an aide to solving problems.

ADOPTED TEXT OR PRINCIPAL MATERIALS USED:

Anton, Howard. *Calculus, A New Horizon*, 6th edition. John Wiley and Sons, 1999.
(Adopted 1999)