Benefits of the AP Program

AP provides students the opportunity to take university- level classes while still in high school.

AP courses develop college level academic skills by digging deeper into subjects, requiring students to hone their time management and study skills while tapping into their creativity and problem-solving skills.

College credit is awarded if the student passes the AP exam with a 3 or higher.

AP credits are accepted internationally. Always check with potential colleges prior to taking classes.

AP courses stand out in the college admission process because they demonstrate academic rigor.

AP Scholar Granted to students who receive scores of 3 or higher on three or more AP Exams.

AP Seminar and Research Certificate is granted to students who earn scores of 3 or higher in both AP Seminar and AP Research.

AP Capstone Diploma is awarded to student who earn scores of 3 or higher in AP Seminar and AP research and four additional AP exams of their choosing.

AP Offers additional quality points in the weighted GPA

Passing score on AP US History or AP Government exam may be used to meet the new Civics graduation requirement.
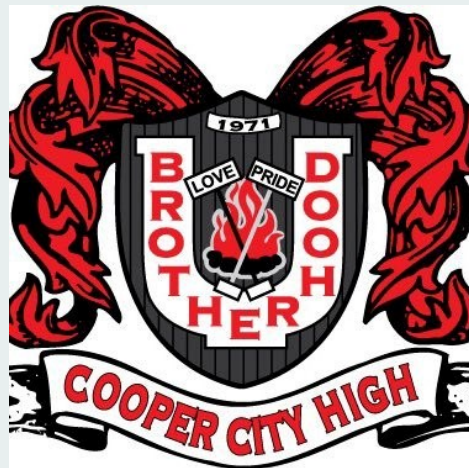
AP Prepares students for College!
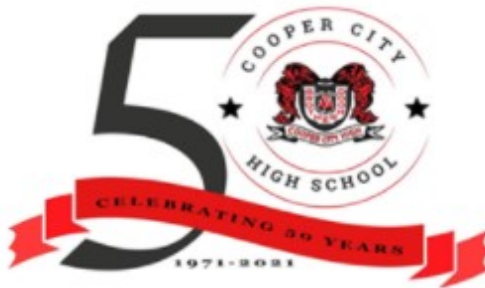

Cooper City High School
9401 Stirling Rd
Cooper City, FL 33328
(754) 323-0200

Colors: Black, White, Red
Established: 1971
Mascot: Cowboy Pete
Motto: "**Home of the Cowboys**"

Mrs. Vera Perkovic
Principal
Cooper City High School
Excellence. Tradition. Pride.
Twitter: @Principal_CCHS

AP Calculus AB
AP Calculus BC
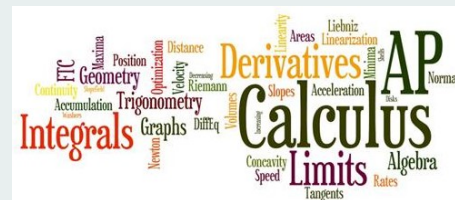
Presented by

Ms. Michelle Harding

Mathematics Teacher

michelle.harding@browardschools.com

CollegeBoard
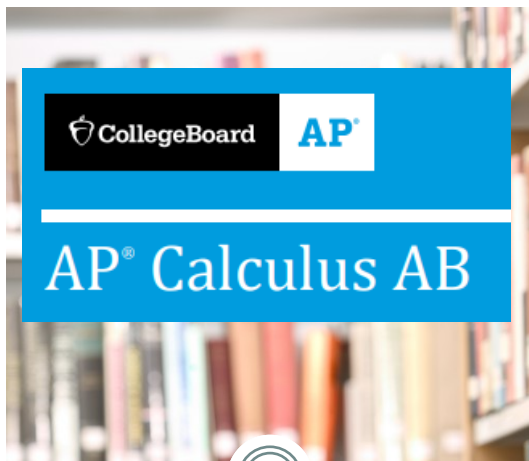
AP® Calculus AB

AP Calculus Program AP Calculus AB and AP Calculus BC focus on students' understanding of calculus concepts and provide experience with methods and applications.

The courses feature a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally.

Graphing Calculator Capabilities for the Exams

A graphing calculator appropriate for use on the exams is expected to have the built-in capability to:

♦ plot the graph of a function within an arbitrary viewing window

♦ find the zeros of functions (solve equations numerically)

♦ numerically calculate the derivative of a function

♦ numerically calculate the value of a definite integral

AP Calculus Course Content

The course content is organized into eight commonly taught units, which have been arranged in the following suggested, logical sequence:

AB and BC

☐ Unit 1: Limits and Continuity

☐ Unit 2: Differentiation: Definition and Fundamental Properties

☐ Unit 3: Differentiation: Composite, Implicit, and Inverse Functions

☐ Unit 4: Contextual Applications of Differentiation

☐ Unit 5: Analytical Applications of Differentiation

☐ Unit 6: Integration and Accumulation of Change

☐ Unit 7: Differential Equations

☐ Unit 8: Applications of Integration

BC ONLY

☐ Unit 9: Parametric Equations, Polar Coordinates, and Vector Valued Functions

☐ Unit 10: Infinite Sequences and Series

Find $\int \left(2 + 5x - \dfrac{1}{(x-2)^2}\right)dx$

PREREQUISITES

Before studying calculus, all students should complete the equivalent of four years of secondary mathematics designed for college-bound students: courses that should prepare them with a strong foundation in reasoning with algebraic symbols and working with algebraic structures.

Prospective calculus students should take courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. These functions include linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise-defined functions.

Assessment Overview

The AP Calculus BC Exam assesses student understanding of the mathematical practices and learning objectives outlined in the course framework.

The exam is 3 hours and 15 minutes long and includes 45 multiple-choice questions and 6 free-response questions.

Sign In to AP Classroom

You need a College Board student account to log into My AP and access AP Classroom. You can also find the quizzes, tests and videos your teacher has assigned to you here. You may already have an account, from registering for SAT tests and viewing AP scores.