

ADVANCED PLACEMENT PROGRAM

District 200 offers multiple Advanced Placement (AP) courses. These courses are open to all students, but students are reminded that AP courses are college level courses, taught under college-like methods, with full college-level academic expectations. It is strongly advised that all students confer with counselors to determine if AP course selection is appropriate. Prerequisites are essential for Advanced Placement success because such experience provides the mastery level so important to the accelerated pace of these courses.

In addition to the college-level experience of such courses, the AP program offers students the opportunity to receive college credit. Such credit is granted by the individual college or university, not by the high school. Furthermore, not all colleges and universities recognize the Advanced Placement program, its tests, and/or individual student test performance. Students/parents are advised to consult with the specific institution to ascertain its policy concerning Advanced Placement credit.

The high school experience for gifted students is heavily dependent on the Advanced Placement program. Students identified through the elementary and middle school gifted programs generally follow a program that includes advanced level courses, Advanced Placement courses, and enrollment in a sequence of courses including, Gifted World History, Advanced Placement U.S. History, and Gifted Seminar.

Ordinarily, students sit for the Advanced Placement examinations after completion of the course. Nevertheless, students may also sit for Advanced Placement tests even if such a course was not completed or the course was not offered by the school. It is not uncommon for students to take Advanced Placement tests in connection with the highest level of high school courses completed. Foreign language courses, particularly those in the fifth year, often use the AP testing program as a voluntary assessment tool. Advanced Placement teachers will announce information about the AP tests. Information is also included in the daily announcements in early spring. Tests are administered, at student expense, in May.

ADVANCED PLACEMENT BIOLOGY (A)

Two Semesters

Prerequisite: Physics/Chemistry (A), Biology (A), Chemistry (A)

Qualifies for Applied Technology Credit

Advanced Placement Biology is intended for students who are considering a major in biology, biotechnology or the health fields. The course includes content from three general areas: molecules and cells, heredity and evolution, and organisms and populations. Advanced Placement Biology is designed to be the equivalent of a college introductory biology course taken by biology majors. If successfully completed, it offers students the possibility to take upper-level biology courses, or courses for which biology is a prerequisite, as a college freshman. Advanced Placement Biology provides students with the conceptual framework, factual knowledge, and analytical skills necessary to deal with the rapidly changing science of biology.

ADVANCED PLACEMENT CALCULUS AB (A)

Two Semesters

Prerequisite: Precalculus 2 (I)

Recommended: Students taking I level Precalculus enroll in Calculus AB. Students enrolled in A level Precalculus, who receive an A or B, should enroll in Calculus BC. Students who receive a C in A level Precalculus should consult their instructor for guidance in placement.

Qualifies for Applied Technology Credit

Advanced Placement Calculus AB is a college-level calculus course designed for the student with a high ability in mathematics. The course follows the syllabus of the Advanced Placement Calculus AB and enables a student to test out of one semester of college calculus. The topics in this course include functions, graphs, and limits; derivatives and their applications; and the integral and its applications, and transcendental functions. The graphing calculator will be required and used extensively.

ADVANCED PLACEMENT CALCULUS BC (A)

Two Semesters

Prerequisite: Precalculus 2 (A)

Recommended: Students taking A level

Precalculus enroll in Calculus BC. Students enrolled in A level Precalculus who receive an A or B should enroll in Calculus BC. Students who receive a C in A level should consult their instructor for guidance in placement.

Qualifies for Applied Technology Credit

Advanced Placement Calculus BC is a college-level calculus course designed for the student with high mathematical ability. The course follows the syllabus of the Advanced Placement Calculus BC. The topics in this course include the rate of change of a function, limits, derivatives of algebraic functions, applications of the derivative, integration, applications of the definite integral, transcendental functions, infinite series, and differential equations. The graphing calculator will be required and used extensively.

Advanced Placement Calculus BC enables a student the opportunity to test out of two semesters of college Calculus.

ADVANCED PLACEMENT CHEMISTRY (A)

Two Semesters

Prerequisite: Physics/Chemistry (A) and Chemistry (A)

Recommended: Concurrent enrollment in Precalculus

Qualifies for Applied Technology Credit

Advanced Placement Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, as freshmen, second-year work in the chemistry sequence at their institution or to register for courses in other fields where general chemistry is a prerequisite. For other students, the Advanced Placement Chemistry course fulfills the laboratory science requirement.

Students are expected to attain an in-depth understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. The college course in general chemistry differs qualitatively from the usual first secondary school course in chemistry with

respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. Quantitative differences appear in the number of topics treated, the time spent on the course by students, and the nature and the variety of experiments done in the laboratory.

ADVANCED PLACEMENT COMPUTER SCIENCE A (A)

Two Semesters

Qualifies for Math or Applied Technology Credit

Prerequisite: Computer Programming or consent of Instructor

Advanced Placement Computer Science A is a continuation of Computer Programming. It follows the syllabus of the Advanced Placement Computer Science A curriculum. The course is built around the development of computer programs or parts of programs that correctly solve a given problem. Additional lab time may be needed to complete the course requirements.

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION (A)

Two Semesters

The Advance Placement English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. The course requires intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit.

Writing is also an integral part of the Advanced Placement English Literature and Composition course, for the Advanced Placement Examination is weighted toward student writing about literature. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. The goal of writing assignments is to increase students' ability to explain clearly, cogently, even elegantly, what they understand about literary works and why they interpret them as they do.

ADVANCED PLACEMENT EUROPEAN HISTORY (A)

Two Semesters

Advanced Placement European History covers the events and movements that occurred in Europe during the time period 1450 to the present. The events and movements of the past are explored through the themes of cultural and intellectual development, political and diplomatic events, and social and economic movements. Students will gain experience analyzing historical documents and expressing their historical understanding in writing. Students will be prepared for and should take the Advanced Placement test in European History.

ADVANCED PLACEMENT MACROECONOMICS (A)

One Semester

Prerequisite: AP Microeconomics

Qualifies for Applied Technology Credit

Advanced Placement Macroeconomics is designed to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price determination, and also develops familiarity with economic performance measures, economic growth, and international economics. Students will be prepared for and should take the Advanced Placement test in Macroeconomics.

ADVANCED PLACEMENT MICROECONOMICS (A)

One Semester

Qualifies for Applied Technology Credit

Advanced Placement Microeconomics provides a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

ADVANCED PLACEMENT PHYSICS B (A)

Two Semesters

Qualifies for Applied Technology

Prerequisite: Physics/Chemistry (A), Physics (A), Calculus or concurrent registration in Calculus

Advanced Placement Physics B ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or preceded by mathematics courses that include calculus. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. This course the first part of a sequence which in college is sometimes a very intensive one-year course but often extends over one and one-half to two years, with a laboratory component.

ADVANCED PLACEMENT PSYCHOLOGY (A)

Two Semesters

Advanced Placement Psychology is designed for students who wish to study human behavior and mental processes at a level that approximates an introductory college course. This course exposes students to a wide range of concepts, research findings, and psychological theories while emphasizing application (demonstration, discussion, and projects) so the students can see how these relate to their own lives. Topics include the historical development of the schools of psychology, research methods; the biological determinates of behavior, states of consciousness, sensation and perception, conditioning and learning, cognition and memory, testing individual differences, normal and abnormal personality development, different types of therapy, and social psychology. Students who take Psychology (I) may not enroll in Advanced Placement Psychology. Students who complete this course will be prepared for and should take the Advanced Placement Psychology exam.

**ADVANCED PLACEMENT STATISTICS
(A)**

Two Semesters

*Prerequisite: Precalculus (I or A) or Algebra 2 and Trigonometry with teacher recommendation
Qualifies for Applied Technology Credit*

Advanced Placement Statistics is an introductory, non-calculus-based course in statistics. It will introduce students to the concepts and tools for collecting, analyzing, and drawing conclusions from data. Four broad conceptual themes will be covered: 1) exploratory analysis of data, 2) planning a study, 3) probability, and 4) statistical inference. The graphing calculator (use of a TI-83 is an expectation for the Advanced Placement Test) will be used throughout the course. Students who complete this course will be prepared for and should take the Advanced Placement Statistics exam.

**ADVANCED PLACEMENT UNITED
STATES GOVERNMENT AND POLITICS
(A)**

One Semester

Recommended: U. S. History

Advanced Placement United States Government and Politics is an introduction to the nature of government and the dynamics of American politics. Included are the origins of American Democracy, the federal system, its political party base, local politics, and objectives of political action. The student will actively participate in the political process and have an opportunity to listen to political speakers in the classroom. Students successfully completing this course will meet graduation requirements in representative government, proper use of the flag, and methods of voting. This course is intended for the advanced student. Students who complete this course will be prepared for and should take the Advanced Placement Government and Politics (U.S.) exam.

**ADVANCED PLACEMENT UNITED
STATES HISTORY (A)**

Two Semesters

Advanced Placement U. S. History is designed to develop analytical and critical thinking skills as students deal with the problems and events in U. S. History. Students should learn to assess historical materials or information and make valid interpretations. The course is designed to develop skills necessary to arrive at conclusions based on informed judgments. Students will be taught that, in forming conclusions, all evidence will have to be presented in a clear and persuasive manner. The information may be presented in either oral or written exercises. The course may involve research, extensive reading, and in-depth written assignments. It will cover U. S. History beginning with the period of exploration and discovery and concluding with recent history. Students will be provided with the opportunity to take the advanced placement exam.