

## Advanced Placement Courses

Advanced Placement (AP) courses are taught at a college level and require excellent organizational skills, strong study habits, the ability to work independently and cooperatively, and a high level of interest and commitment.

Students can expect to spend substantial time outside class preparing assignments, reading, and writing papers. Many courses have summer assignments to prepare students for the challenge of their AP course(s). Completion of these assignments is required to enroll in August. Students may receive college credit by taking the AP test in May, provided they earn a score deemed high enough to be acceptable to the college/university of choice. AP courses will cover topics included on the AP tests; practice exams will be offered. To enroll in AP Courses, students shall have met the pre-requisites, obtained a teacher recommendation, considered the independence and commitment level required for both success and management of time and activities/obligations, and completed a contract (see "Forms" section of booklet) which acknowledges they will stay in the course the entire year and will take the AP exam in May.

| AP English III | AP United States History | AP Calculus | AP Statistics | AP English IV |
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| This course emphasizes the rhetorical structures of effective nonfiction writing. There will be some study of American Literature and its relationship to the historical and cultural trends of American society; however, short nonfiction analysis and writing are the backbone to the syllabus. There will be a summer assignment due the first day of school. (11) | This course is equivalent to a two semester college survey course in United States history. It satisfies the US history part 1 and part 2 requirement in one year. Students should expect to spend considerable time outside of class reading from both an AP approved text and from numerous primary sources. This course will require students to develop analytical and interpretive skills. In class and out of class writing assignments are also emphasized. There will be a summer assignment. <br> Pre-requisite for rising sophomores: A in Honors World History, C in AP World History. Prerequisite for rising juniors: B in American History I. $(10 / 11)$ | This course emphasizes a multi-representational approach to calculus, with concepts, results, and problems expressed geometrically, numerically, analytically, and verbally. Topics include: functions, limits, derivatives and their applications, techniques of integration, the definite integral, and applications of the integral. (11/12) | This course emphasizes the major concepts and tools for collecting, analyzing, and drawing conclusions from data; planning and conducting surveys and experiments, producing models using probability and simulations, and statistical inference. (11/12) | This course emphasizes critical reading and analysis of literature, and writing analytical, expository essays about the literature. The focus will be on literature including short stories, drama, novels, poetry, and essays. (12) |
| AP Psychology | AP European History | AP Chemistry | AP Biology | AP Physics C Mechanics |
| This course studies the behavior and mental processes of human beings and other animals. Students explore psychological facts, principles, and phenomena of the major sub fields and the methods psychologists use in their science and practice. <br> Pre-requisite for rising juniors: C in AP US History, B- in Standard or Honors American History II. | The study of European history since 1450 introduces students to the cultural, political, and social developments that played a fundamental role in shaping the world in which they live. This permits a context for the understanding of the development of contemporary institutions, societies and politics. This class also deals with the evolution of current forms of artistic expression and intellectual discourse. <br> Pre-requisite: B in Honors American History II and/or a passing grade in AP US History. $(11 / 12)$ | This course is an in-depth, second course in chemistry. The curriculum will include Atomic Structure, Bonding, Stoichiometry, Gases, Phase Changes, Thermodynamics, Solutions, Equilibrium, Acids and Bases, Kinetics, Oxidation/Reduction, Electrochemistry, Nuclear Decay, Organic Chemistry and Descriptive Chemistry. The pace of this class is fast with roughly 30 percent devoted to lecture, 40 percent to in-class problem solving and exercises and 30 percent labs. Expect to devote 6-9 hours per week to independent study, review and class preparation. | Laboratory investigations, process skills, critical thinking, and problem solving are integral components to this in depth study of the biological sciences. Expect a lot of reading, independent study, research, and a fast pace in this college level class. (12) | This course is highly mathematical; in-depth treatment of rectilinear, circular and simple harmonic motion; application of Newton's laws of motion in one, two and three spatial dimensions; problem solving with differential and integral calculus. Introduction to the construction and solution of differential equations as applied to mechanics. Proficiency in laboratory work, process skills, and problem solving are integral to success in this course. Students must be highly proficient in applying, manipulating and solving sets of algebraic equations. Students will have an opportunity to apply the physics learned in the course to a realworld problem. This course requires on average of 1 hour of dedicated study outside of the classroom |


|  |  |  |  | per day to become highly successful. <br> (12) |
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| AP Environmental Science <br> The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and humanmade, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. $(11 / 12)$ | AP Spanish V \& VI <br> These courses will be conducted entirely in Spanish. Students will work to expand their vocabulary; deepen their knowledge of grammar; read fiction, history, poetry, and articles; write diaries, essays, and stories; talk extemporaneously on a variety of topics; and listen to tapes, songs, and videos to sharpen comprehension. Level V focuses on language and level VI on literature. $(11 / 12)$ | AP French V <br> This course is conducted entirely in French. The topics follow the six main areas of knowledge and 15 topic questions of the College Board curriculum. It requires a high level of control in reading, writing, speaking and listening comprehension as we follow current events. An in depth cultural knowledge of both the United States and French speaking countries will be useful and further developed. <br> (11/12) | AP Music Theory <br> Develop musical skills and knowledge leading to a thorough understanding of music theory and composition. (11/12) | AP Art History <br> AP Art History offers a chronological survey of Western art from the dawn of civilization to the present time. Non-Western art will also be covered. The course gives emphasis on the unique position and role played by the artist and the work of art, its context, and the critic. Special attention is given to our interpretation of a work of art based upon its intended use, audience, and role in a particular society. As a survey course, the material is approached as an introduction to the discipline. Two goals of the course are to encourage the student to pursue further study in college as well as become versed in the visual language of art. Summer assignment is required. Students receive an elective social studies credit upon completion of the class. This is an intensive year-long course in which the student can receive college credit at participating universities. This is an intensive yearlong course in which the student can receive college credit at participating universities. |
| AP Studio Art <br> This course is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consist of three portfolios - 2-D Design, 3D Design, and Drawing corresponding to the most common college foundation courses. <br> (12) |  |  |  |  |

