# WOODINVILLE HIGH SCHOOL 



FALCONS

## Advanced Placement Program 2018-19

## AP

## "Commit to excellence and a challenge to excel."

The Advanced Placement ${ }^{\mathrm{TM}}$ (AP) program at Woodinville High School is a cooperative educational program created by the College Board that offers college-level curricula, examinations, and possible college credit while students pursue their education at a high school known for academic and extra-curricular excellence and accommodating and meeting the needs of its students.

## For Students Who Want a Challenge

- Rigorous and complex subject matter in over 25 courses, across a wide spectrum of subject areas, is presented in a discussion, lecture, and testing format.
- Covering more material than traditional courses, AP classes require college-level research, writing, and analysis.
- Challenging as introductory college courses, AP coursework experience can ease a student's academic transition from high school to first-year college student.
- AP classes attract and challenge highly motivated students wishing to excel academically and also serve the highly capable student in the high school setting.
- AP students can explore individual strengths in an environment that supports academic achievement in all areas and disciplines across seven different content departments.


## High Standards

- The AP Program supports educational reform focused on increased standards, testing, and mastery certification; striving to raise the bar in this complex and competitive $21^{\text {st }}$ century work environment and global economy.
- The work is challenging, but the reward is great, and AP classes signal to admissions officers that a student is ready for college-level work.
- The AP Program at WHS provides an opportunity for students to take classes that have all the rigor and expectations found in the college setting while allowing these students to take advantage of the diversity of activities and leadership positions available at a large comprehensive high school.


## Taught by Qualified Staff

- The faculty at Woodinville High School, many with master's degrees, doctorates, and national board certifications has enthusiastically embraced AP as a quality program that allows them to teach advanced material to interested and thoughtful students.
- All teachers of AP courses must exhibit thorough subject knowledge and attend AP seminars and summer workshops to help ensure the highest efficacy possible.
- The AP Program has been built on the partnership and commitment between students and educators from both secondary schools and higher education. College faculty review every AP teacher's course syllabus.


## A Conscious Choice

- Woodinville High School has chosen the academically rigorous AP Program because it is designed to prepare our students to succeed and prosper in college, university, or vocational settings in preparation for a future career.
- For the motivated learner, the AP environment offers a clear perspective on university methods and expectations, and upon passage of the spring exams may lessen the burden of first-year college tuition expenses.
- The AP Program provides the tools needed to succeed in college and meets the needs of both the dedicated student and the concerned parent.


## A Program with Global and National Credibility

- Students take pride in nationally recognized achievement that better prepares them to continue their education in whatever area they choose.
- The Advanced Placement path has the support and respect of universities across the United States and in 60 other countries around the world.
- Every aspect of AP course and exam development is the result of collaboration between AP teachers and college faculty. They work together to develop AP courses and exams, set scoring standards, and score the exams lending to the program's national and global recognition.
- Nine of the past ten years, WHS earned national honors as a Silver Medal Best High School recipient in U.S. News \& World Report magazine largely credited to our high quality Advanced Placement program.


## AP CAPSTONE DIPLOMA PROGRAM

AP Capstone ${ }^{\mathrm{TM}}$ is an innovative and engaging college-level diploma program developed in response to feedback from higher education. Based on two yearlong AP courses, AP Seminar and AP Research, students focus on developing the critical thinking skills, research, collaboration, time management, and presentation skills needed for college-level work.

- The first year of the AP Capstone program students take the AP Seminar course where they investigate a variety of topics through various viewpoints of their choice, considering an issue from multiple perspectives, identifying credible sources, evaluating strengths and weaknesses or arguments, and making logical, evidence-based recommendations.
- The second year of the program, students take the AP Research course where they explore various research methods and complete an independent research project. The project can build on a topic, problem or issue covered in AP Seminar or on a brand new topic of their own choosing. At the end of the project, students submit an academic paper and present and defend their research findings. These components contribute to the overall AP Research score. There is no end-of-course exam.

If a student earns scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choice, they'll receive the AP Capstone Diploma. If a score of 3 or higher is earned in AP Seminar and AP Research, students receive the AP Seminar and Research Certificate.

## ADVANCED PLACEMENT Q\&A

Many of our students now carry heavy course schedules. Why should we add to their load?
Course load refers to both the number of courses and the level of difficulty. Taking an Advanced Placement course does not necessarily add to the number of courses, since the AP course replaces other requirements. It is true that AP courses are more difficult than other high school classes, but some students in their junior and senior years do not challenge themselves in a way that prepares them for difficult college courses. Students who seem capable of successfully carrying one or more courses should be encouraged to meet the more demanding requirements.

## How does the AP class differ from a traditional honors class?

Since college credit may be earned/granted upon passage of the AP Exam, the rigor of the course is significantly greater than traditional honors courses.

## How are AP students selected?

WHS has an open enrollment policy for AP courses.

## Should students who take an AP course take the AP examination?

We encourage all students to take the exam in the spring. AP Exams are an integral part of an AP course. The exam grade provides an important payoff to students in terms of college credit and advanced placement. Exam results also give AP teachers and administrators important feedback on the strengths and weaknesses of their AP courses. The fee for each AP Exam varies slightly year-to-year and is approximately \$104.

- Provides college credit opportunity for courses and examinations successfully taken in high school.
- Exempts students from some introductory college courses, thus permitting students to move more quickly into upperlevel classes.
- Motivates students to attempt more challenging courses in both high school and college.
- Develops the analytical and study skills required to succeed in college courses.
- Reduces college costs and time to obtain a degree.
- Provides direction in selecting college majors.


## ARTS - VISUAL \& PERFORMING

## AP Studio Art (10, 11, 12)

The AP Studio Art program makes it possible for highly motivated high school students to do college level artwork. During this yearlong course each student will submit a portfolio of 24 works for evaluation at the end of the semester and will prepare their portfolios throughout the year. AP Studio teaches the development of concepts, composition, and drawing techniques to create a portfolio for college entrance. A concentration on works based on the student's individual interest in a particular area, and focuses on the process of investigation, growth, and discovery. Students will focus on the 2-D portfolio options incorporating media such as Drawing, Painting, Collage, Printmaking, and Mixed Media Artwork. This class may be repeated multiple times.

## AP Music Theory $(9,10,11,12)$

The AP Music Theory course corresponds to one or two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills, including dictation and other listening skills, sight singing, and harmony, are considered an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the curriculum through the practice of sight singing. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are also emphasized.

## BUSINESS

## AP Economics $(\mathbf{9}, \mathbf{1 0}, 11,12)$

Students will start the year learning AP Macroeconomics which is the study of the economy as a whole. It includes topics such as: International trade and exchange rates and how interest rates, taxes and government policies influence investment, unemployment, inflation and economic growth. Second semester focuses on AP Microeconomics which is the study of how businesses, individual consumers, and governments interact in the marketplace. It includes topics such as: supply and demand, taxes, business costs (revenue, variable/fixed costs, profit). AP Economics is a fast-paced, challenging and exciting course for any motivated student. The course work in this yearlong class is equivalent to 2 college courses. Students who are successful in this course will be prepared to take BOTH the AP Macroeconomics and AP Microeconomics exams in the spring.

## ELECTIVES

## AP Seminar (AP Capstone I) (11)

The first of two yearlong courses in the AP Capstone Diploma Program, AP Seminar is a foundational course that engages students in crosscurricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Students are assessed with two through-course performance tasks and an end-of-course exam. All three assessments are summative and will be used to calculate a final AP score (using the 1 to 5 scale) for AP Caminar

## Pre-AP English 9 (9)

This course builds upon previous learning of the Common Core State English/Language Arts (E/LA) Standards in middle school, introduces students to the study of Writing Analytically, with focus on various analytical heuristics and their implementation, and establishes the skills necessary for a successful progression of learning for advanced high school E/LA course work. Students will read a variety of texts including but not limited to: non-fiction, novels, plays, poetry, and short fiction. Students will write analytical, persuasive, and narrative essays. Students choosing this course will actively participate in discussions, read extensively, accept constructive criticism, and work diligently and independently.

## Pre-AP English 10 (10)

This advanced class prepares sophomores for rigorous Advanced Placement programs. Students will read a variety of texts including but not limited to: non-fiction, novels, plays, poetry, and short fiction. Students will write analytical, persuasive, and narrative essays. Students choosing this course should be willing to actively participate in discussions, read extensively, accept constructive criticism, and work diligently and independently. Students will continue the study of Writing Analytically, with focus on reasoning claims from evidence.

## AP Language and Composition (11)

Advanced Placement Language and Composition is a yearlong college level course that culminates in the AP Language and Composition examination. Students will cultivate critical thinking by reading a wide variety of fiction and nonfiction texts, and will learn the basic elements of rhetoric. The focus of study will be the literal what of the text, the techniques of style underlying the how, and the timeless, universal connections of why. Students will focus on three types of essays: synthesis, rhetorical analysis, and argument. Students will continue the study of Writing Analytically, with focus on evolving thesis statements and supporting claims with properly cited, complex analysis.

## AP English Literature and Composition (12)

Advanced Placement Literature and Composition is a yearlong college level course that culminates in the AP Literature and Composition examination. Students will learn to produce complex academic arguments by reading a wide variety of text drawn from multiple genres, periods, and cultures. Students will continue their study of Writing Analytically with a focus on Critical Lens Essays and Academic Conversations.

Note: AP English Language and Composition and AP English Literature and Composition form a two-year program of study and should be taken in sequence. While this is a recommendation, AP English Language and Composition is open to students who are wishing to challenge themselves in a college level course even though they do not intend to take AP English Literature and Composition.

## MATHEMATICS

AP Prep Pre-Calculus $(9,10,11,12)$
This course covers the Pre-Calculus content with greater breadth and depth at a college level of rigor. Students will continue to build and expand upon their understanding of functions and equations to include quadratic, exponential, logarithmic, polynomial, rational, radical, power, and trigonometric functions. A scientific calculator is required. The Texas Instrument TI-83 or TI-84 family of graphing calculators is strongly recommended.

## AP Statistics (9, 10, 11, 12)

This course is designed to offer a continued study of quantitative thinking in the areas of statistics and probability for the serious math student. Throughout this course students will be introduced to the major concepts and tools for collecting and analyzing data as it relates to four conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. This course reflects the content of a typical introductory college level statistics course. This course may be taken concurrently with another mathematics course offering. A scientific calculator is required. The Texas Instrument TI-83 or TI-84 family of graphing calculators is strongly recommended.

AP Calculus I (AB) (10, 11, 12)
AP Calculus AB is a course designed for students with a high interest and strong background in mathematics. Students can choose the AP Program, or the Cascadia College in the High School program. The first semester of the course is equivalent to Math 151 (Differential Calculus). Both programs include a conceptual development, a formal development, and applications of basic differential and integral calculus. Emphasis is on process, problem solving, and clear communication of ideas and techniques. A scientific calculator is required. The Texas Instrument TI-83 or TI-84 family of graphing calculators is strongly recommended.

## AP Calculus II (BC) $(\mathbf{1 0}, 11,12)$

AP Calculus BC is a course designed for students who have successfully completed Calculus I. The first semester of this course is equivalent to Math 152 (Integral Calculus). The curriculum builds on Calculus I and extends to cover a second quarter and part of a third quarter of college calculus. Topics of study may include advanced integration techniques and applications, functions of several variables, parametric and polar functions, sequences and series, and vectors in R2 and R3. A scientific calculator is required. The Texas Instrument TI-83 or TI-84 family of graphing calculators is strongly recommended.

## SCIENCE

## Pre AP Bio/Chemistry (9)

This is a rigorous and fast-paced course designed to give students interested in science and intending to take AP Biology and/or AP Chemistry the strong foundation in content and scientific practices necessary to succeed without taking two years of coursework to do so. The curriculum is aligned to the NGSS high school performance expectations for biology and chemistry and emphasizes experimental methodologies. Students will participate in developing scientific questions, plan and implement scientific investigations, analyze data, and formulate scientific explanations in this demanding and engaging course.

## AP Environmental Science (9, 10, 11, 12)

AP Environmental Science is open to all students. The class will provide students with an understanding of the scientific principles that govern interrelationships in the natural world. Important environmental issues will be explored and the comparative risks of known and potential problems will be evaluated. Specific focus on finding solutions to current and future challenges will be highlighted. This course meets college entrance requirements for an algebra-based science.

AP Biology (9, 10, 11, 12)
This is a college level science course. Advanced Placement Biology is a second year course designed to prepare students to do well on the optional Advanced Placement Biology exam. It will consider, but not be limited to, biology, ecology, chemistry of cells, cellular energy, evolutionary diversity of organisms, function of plants and animals, heredity, life, and molecular genetics and structure. A strong chemistry background is helpful. These topics will be covered through class discussions, lectures, independent student research and both teacher-directed and independent experiments. Some dissection may be required. Students need to be able to work independently. Course offering is subject to staff availability and student enrollment. This course meets college entrance requirements for an algebra-based science.

## AP Chemistry (10, 11, 12)

AP Chemistry will delve more deeply into the concepts covered in first year chemistry. This class will cover the same materials as is covered in Chemistry 140-160 at the University of Washington (and most other college General Chemistry courses). The class will pick up where Chemistry left off, moving quickly into the application of equilibrium concepts to gaseous, ionic and acid-base systems.

## AP Computer Science A $(\mathbf{9}, \mathbf{1 0}, \mathbf{1 1}, 12)$

This course introduces students to object oriented programming by teaching fundamental computer science concepts using the Java language. The curriculum mirrors the CSE 142 and 143 classes at UW. Students are challenged to solve problems in new ways through procedural decomposition. Students will learn definite and indefinite looping, using varying data types, crafting methods with parameters and return values, branching with conditional execution, reading and writing to files, managing arrays and other collections, crafting classes and interfaces, optimizing searching and sorting procedures, and evaluating advanced recursive algorithms.

## AP Physics 1: Algebra-Based (9, 10, 11, 12)

This is a college level science course. AP Physics 1 is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and touches a bit on electricity.

## AP Physics 2: Algebra-Based (10, 11, 12)

This is a college level science course. AP Physics 2 is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics.

## SOCIAL STUDIES

## AP Human Geography (9)

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. In addition, this course will focus on reading, writing, and study skills to help prepare students to be successful in high school and beyond. AP Human Geography addresses the Common Core State Standards for History, prepares students for the Smarter Balanced State Assessments, and establishes the skills necessary for a successful progression of learning to the next grade level of Social Studies course work.

## AP Art History $(\mathbf{9}, \mathbf{1 0}, 11,12)$

Advanced Placement Art History is a challenging and exciting course for students. The class is designed to introduce students to the understanding, appreciation, and enjoyment of works of art. The class study begins with the ancient world and continues through the current day. We will cover the development of artistic styles, major movements and figures, mediums and techniques, architecture, and make relevant historical connections. No experience is necessary, but this is a college level class and a student should be prepared for an increased workload.

AP Psychology (9, 10, 11, 12)
The Advanced Placement Psychology course is designed to introduce students to the systematic and scientific study of human mental processes and behavior. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology (such as: history and approaches, research methods, biology and behavior, learning and cognition, developmental and abnormal psychology, and social psychology). Students will also learn about careers in psychology and the pathways to additional training. This course is equivalent to an introductory college course in psychology. As a college level course, AP Psychology is best suited for students willing to apply themselves to the study of interesting and sometimes challenging material.

## AP European History (9, 10, 11, 12)

Study will begin with the Renaissance, focus on major events and conclude with modern times. Because of the emphasis on preparation for the AP Exam and the resulting potential college credit, work levels will be more demanding and only motivated students should take this class.

AP World History $(9,10)$
This is a college level yearlong course designed to develop greater understanding of global history; the study of human interactions and their consequences throughout history. This class begins its study in ancient history and ends with an investigation of present day global relations.

## AP United States History (11)

The AP program in United States History is designed to provide students with analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. This program prepares students for immediate and advanced college courses by making demands upon them equivalent to those of full - year introductory college courses. This accelerated survey course will cover topics from the Age of Discovery to the present. Students who enroll in the course will be expected to by highly motivated, willing to accept academic challenges and capable of moving at a fast pace. Only highly motivated students are encouraged to enroll.

AP US Government \& Politics (12)
This course provides both a study of broad, general concepts of the United States political system, as well as the analysis of specific case studies. Basic concepts include the Constitutional basis of US Government, political ideals and behaviors, the political party system, institutions of the national government, public policy and civil rights/liberties. Emphasis is placed on critical thinking skills, essay writing and interpretation of original documents. Only highly motivated students are encouraged to enroll. This course meets the following graduation requirements for social studies: 1 semester of Civics and 1 full year of Contemporary National/World Issues.

## WORLD LANGUAGES

## 4th Year Language ( $10,11,12$ )

AP French 400
AP German 400
AP Spanish 400

In the fourth year of the World Languages program, the AP curriculum focuses on interpersonal, interpretive, and presentational skills about global topics in French, German, or Spanish, as well as overall fluency in the respective language. Each class is conducted entirely in French, German, or Spanish. The five Cs of language learning (Communication, Connections, Cultures, Comparisons and Communities) will be practiced regularly as students become familiar with the six themes of the AP Language and Culture course. The themes are as follows: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities and Beauty and Aesthetics. Students' language skills will be ameliorated by writing regularly in a variety of formats, participating in class and small group discussions, listening to French, German, or Spanishlanguage music and news stories and reading texts from the French, German or Spanish-speaking world.

LEARN MORE ABOUT ADVANCED PLACEMENT AT WHS

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Visit the College Board at: https://ap.collegeboard.org https://advancesinap.collegeboard.org/ap-capstone


See the WHS 2018-2019 Course Catalog for further details

