

ADVANCED PLACEMENT

Programs at Cariboo Hill Secondary



Why AP?

Advanced Placement Can Help Your Child Succeed!

Research shows that students who take AP courses have a higher likelihood of earning their university degree on a 4 year timeline and score higher in university courses.

Students who successfully complete the AP exam with a minimum of 4 or 5 may be granted credit for a similar course upon admission to university/college. This can save hundreds of dollars in tuition and some institutions may use the scores to place first year students in higher level classes within their first semester.

Regardless of whether they write the exam, their completion of the course is acknowledged on their official B.C. Ministry of Education transcript and results in more favourable consideration by post-secondary institutions. AP courses are now being used to demonstrate rigour and differentiate between students in the post-secondary admissions process.

The AP program services more than 2 million students with the Burnaby School District being the largest AP program in Canada. Last year alone, Burnaby administered nearly 2100 exams to 1200 students districtwide. What's more, BC boasts the highest AP grades for a state/province worldwide. **In particular Burnaby's students consistently score 10% higher than the national average.** Each year the AP program across Burnaby grows serving as a testament to its success and academic importance to our students and their families.

At Cariboo Hill, approximately 40% of our senior students enrolled in at least 1 AP course over their 2 senior years. Of the students who write the AP exam in May, **70% scored 3 or higher: more than 10% above the national average.**

In the past 15 years, Cariboo Hill Secondary has had:



50 AP Scholars

10 AP Scholars with Honours

8 AP Scholars with Distinction

5 National AP Scholars (Canada)

Mathematics & Business

AP Calculus

This course includes the study and application of differentiation, integration, and graphical analysis including asymptotes and continuity. This course is equivalent to one semester of post-secondary calculus.

Topics include: Analysis of graphics (predicting & explaining behaviour), Limits of functions (one and two sided), Asymptotic and unfounded behaviour, Derivatives, Integrals, Fundamental theorem of calculus and anti-differentiation.

AP Statistics

This course prepares students for the rigours of post-secondary mathematics and allows students to discover the numerous applications of statistics. This course is beneficial for anyone going into Engineering or data analysis. Students will maximize the development and comprehension of fundamental concepts through computer or calculators to perform mechanical calculations.

Topics include: Exploring data (relating patterns and departures from patterns), Sampling & experimentations, Anticipating patterns, and Statistical inferencing

AP Computer Science A

This course allows students to become familiar with the concepts and tools of computer science as they learn a subset of the Java programming language. Students will do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks.

Topics include: Designing a program, developing the algorithms needed, and writing code to implement them, Testing program code and correcting errors, Documenting and explaining how program code works.

AP Business Principles (Coming 2024-2025 School Year)

This course allows students to explore business practices and concepts that will be used to gain the skills required to succeed in post-secondary business institutions like Sauder School of Business at UBC or Beedie School of Business at SFU. Students will explore the main business principles that allow businesses and products to succeed.

Topics include: Improving communication with clients, Developing leadership capacity and capabilities, Understanding different organizational structures, and Creating and promoting high-quality products.

Mathematics & Business

AP Microeconomics

This course provides students an understanding of the principles of economics that apply to individual decision makers, consumers, and businesses within the economic systems. Students will use graphs, charts, and data to analyze, describe, and explain economic concepts. This course is often taught in conjunction with AP Macroeconomics in the same year and these courses are a benefit for those studying business in post-secondary.

Topics include: Defining economic principles and models, Explaining given economic outcomes, Determining outcomes of specific economic situations, Model economic situations using graphs or visual representations

AP Macroeconomics

This course starts with fundamental economic concepts like scarcity, opportunity costs, production possibilities, and supply & demand determination. Students will explore the actions that governments and countries take to influence broader economies. This course is often taught in conjunction with AP Microeconomics in the same year and these courses are a benefit for those studying business in post-secondary.

Topics include: Measuring economic performance, National income & price determinations, Fiscal/Monetary policies, and International economics and growth.

Sciences

AP Biology

This course covers an intensive AP curriculum over a 2-year period. Biology 11 Honours and Biology 12 AP are designed to explore students to regular biology content with additional topics of exploration to prepare them to write the AP exam.

Topics include: Evolutionary theory, Free energy in living systems, Communication of information, Exploring interactions of complex living systems

AP Environmental Science

This course allows students to explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made while taking part in laboratory investigations and field work.

Topics include: Explaining environmental concepts and processes, Proposing a solution for an environmental problem and supporting your idea with evidence, Applying quantitative methods in solving problems.

Sciences

AP Chemistry

This course covers an intensive AP curriculum over a 2-year period. Chemistry 11 and Chemistry 12 with first-year university chemistry. Students will learn about the fundamental concepts of chemistry including structure and states of matter, intermolecular forces, and reactions. You'll do hands-on lab investigations and use chemical calculations to solve problems.

Topics include: Designing experiments and procedures to test a prediction or theory, Balancing chemical equations, Creating graphs, diagrams, and models that represent chemical phenomena.

AP Physics 1

This course covers from Physics 11 and is the equivalent to a first-semester university course in algebra based physics.

Topics include: Newtonian mechanics (dynamics and momentum), Work, Energy, Power, and Mechanical waves/sounds.

AP Physics 2

This course covers from Physics 12 and is the equivalent to a second-semester university course in algebra based physics.

Topics include: Fluid mechanics, Thermodynamics, Electricity, Magnetism, Optics, and Atomic & Nuclear Physics.

Humanities & Art

AP English Literature & Composition

This course provides a survey of major literary pieces and significant works of important authors. Students will be prepared for the Literacy assessment and AP exam via time writing, sample tests, lectures, and critical thinking activities. Since this is a course in literature and composition, there will be a profound emphasis on writing. Students will be expected to read, understand, and interpret classical works from the past and present and improve their writing in response to these literary works such as novels, stories, poems, or plays.

Topics include: Identifying themes and writing techniques used by an author and their effects, Present personal interpretation and make an argument for it in writing, Drawing conclusions from various texts.

Humanities & Art

AP World History: Modern

This course explores histories from various regions like Asia (China, India, Japan, The Middle East), Europe, Africa, North America and Indigenous groups from 1200s to current day and explore historic cultural, economic, political, and social events and innovations that impacted these areas. Students will analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments.

Please note: AP World History: Modern and AP Comparative Government will be offered in alternating years with one another.

Topics include: Evaluating primary and secondary sources from different regions, Putting historical developments in global contexts and making connections between them, Coming up with a claim or thesis and explaining and supporting it in writing.

AP Comparative Government

This course uses a comparative approach to examine the government and political structures and policies to examine the political, social, and economic challenges of 6 selected countries of China, Iran, Mexico, Nigeria, Russia, and the United Kingdom—compare the ways they address problems and connect them to Canadian government. Students will analyze data and readings to draw conclusions about political systems.

Please note: AP Comparative Government and AP World History: Modern will be offered in alternating years with one another.

Topics include: Connecting political concepts to real-life situations, Comparing different political systems, institutions, processes, policies, and behaviors, Analyzing data to find patterns and trends and draw conclusions, Coming up with a claim or thesis and explaining and supporting it in writing.

AP African American History (with Canadian Content)

This interdisciplinary course focuses on the diverse African American/Canadian experiences through direct encounters with authentic and varied sources. This course extends from the medieval Kingdom of West African to the ongoing challenges and achievements in the contemporary world. Students will develop skills that emphasis historical development, literary, visual and data analysis. Students will study the diversity of Black communities in the US and Canada with broader contexts of African and African Diaspora.

Topics include: African History and Kingdoms, African American Studies, Slave Trade, strategies for changes and resistance, Black Identity, Abolitionism and Politics, Black Politics, Art/Literature/Music, Civil Rights, BLM, Black Power/ART and Black Pride. This course will also contain Canadian Black history content.

Humanities & Art

AP Psychology

This course covers explores ideas, theories, and methods of the scientific study of human behavior and mental processes. Students will examine the major concepts of psychology: biology, cognition, development and learning, social and personality psychology, and physical and mental health. Scientific inquiry and research methods will be utilized while culture, diversity, gender, stereotypes, and biases are infused throughout the course.

Topics include: The study of the brain and neuroscience, Ethics, Research methods, Cognitive and Behavioural processes, and Social psychology.

As a French Immersion school we do offer the AP French Language and Culture Exam as a challenge exam.



Thoughts About AP



"We like a person who's an academic risk-taker, someone who seeks challenges and rises to meet them,...We'd rather see a B in an AP class than an A in a regular class."

- Registrar of UBC

"One of the best standard predictors of academic success at Harvard is performance on Advanced Placement Examinations."

- William Fitzsimmons, Dean of Admissions & Financial Aid, Harvard University.

*Universities around the **world** recognize AP when making admission decisions, course requisites, and awarding university credit. In fact, half of students entering four-year colleges are now starting school with some credit from AP courses.*

- AP College Board

Student Testimony

The AP program has enriched my life by providing me with the tools to have a successful academic career. Not only did it help me strive for my personal best, but it gave me a head start going into university. The AP program at Cariboo Hill gives its students a taste of a strong work ethic and time management-essentials for success in university.

- E. Harpaz-Lau, SFU Student

AP was incredibly engaging and pushed me to be a better student. It helped me understand and develop skills to be successful in my first few years of university life. My teachers were well trained and knowledgeable.

- E. Lee, UBC Business Student



The exposure to post-secondary-like content was very useful. I gained a lot of skills from AP like time management and studying skills because knowing that I would have a challenging test encouraged me to develop effective study techniques. It also helped me understand and prepare for the workload and type of work and learning in post-secondary.

- A. Rodriguez, Grade 12 Student

Taking AP Psychology 12 last year was a good academic experience that I will never regret. Although at times it was challenging with the number of readings, work, and studying involved, I quickly learned new study methods and how to prioritize my workload. It was a great opportunity for me to get a glimpse of what university will be like for the future. My favourite part was taking a class filled with equally passionate classmates that have similar academic interests and goals as me.

- J. Rigazzi, Grade 12 Student



FAQ's

Is there a fee to take an AP Course?

There is no fee to take an AP course, but there is a fee for writing the Advanced Placement Exam. Since this is an external exam administered by the College Board, we are obligated to charge the students the cost of writing the exam which is currently \$145 CAD.

Can anyone take AP?

Most AP courses are open to students in Grade 10, 11, & 12 who show maturity, a desire for more rigorous/honours course work, have excellent work habits and have developed good critical thinking skills. AP is not for everyone, however, Cariboo Hill offers Open Access to students who are willing to challenge themselves. Courses can only run if there is enough student demand to take them.

What is the difference between IB and AP?

The major difference between the programs is that IB is a two year program where students must complete ALL courses in ALL disciplines to gain the IB Diploma. If a student does not complete one of the courses in IB, the student does not get an IB diploma.

AP students get to choose courses that they find interesting and engaging and take the exam for that course. AP provides students with the flexibility to find academic success in areas they enjoy.

What are the main benefits of an AP course compared to a regular senior level course?

AP Courses are taught by accredited teachers who have passed the rigorous AP Audit process by the AP College Board. Students learn rigorous university/college-level content and skills and can earn post-secondary credits while in high school. The content and skills explored are developed more in-depth than a typical senior level course.

AP Coordinator - Mrs. Sandra Da Silva (she/her)

✉ Sandra.Dasilva@burnabyschools.ca

☎ (604) 296-6890

🌐 <http://cariboohill.burnabyschools.ca/programs/advance-placement-ap-program/>

