

ADVANCED PLACEMENT (AP) COURSES



The AP Program gives students the opportunity to take post-secondary level courses while they are still in high school.

AP courses are challenging and demanding. However, the rewards are many: much smaller class size (compared to post-secondary), complimentary use of textbook(s) and advanced credit and/or placement at participating colleges and universities throughout the world are just some of the benefits.

In addition, students who take an AP course and score a 4 or 5 typically perform better in university than students who do not take an AP course.

In order to obtain advanced placement and/or credit status at a participating college or university, a student will need to write the AP exam(s). Also, students need to check with the post-secondary institution of their choice to see whether AP exams are accepted and what AP exam grade is needed to gain credit and/or advanced placement for a particular course. It is strongly recommended that students conduct this investigation before AP exams are ordered in November (for semester 1 course) and early March (for semester 2 courses). It should be noted, though, that students who take an AP course, even if they do not write the exam, tend to do better in post-secondary.

Information about ordering AP exams will be available to all students in September and January. Please note that each exam costs **\$145** (the price is subject to change with notice due to the fluctuating value of the Canadian dollar). First semester AP students need to pay by October 31st; and second semester courses need to pay by mid-February. All AP exams are written in May. Full course descriptions can be found at the AP website:

<http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>

AP 2D DESIGN PORTFOLIO 12

This portfolio is intended to address a very broad interpretation of 2D design issues. This type of design of space, illusion of motion, pattern, texture, value, and color) are like a palette of possibilities that involves purposeful decision-making about how to use the elements and principles of art in an integrative way. The principles of design help guide artists in making decisions about how to organize the elements on a picture plane in order to communicate content. These principles include unity/variety, balance, emphasis, rhythm, and proportion/scale. For this portfolio, students are asked to demonstrate proficiency in 2D design using a variety of art forms. These could include graphic design, typography, digital imaging, photography, collage, fabric design, illustration, painting, and printmaking. A variety of approaches such as: representation, abstraction, and expression may be part of the student's portfolio.

AP 3D DESIGN PORTFOLIO 12

This portfolio is intended to address a broad interpretation of sculptural issues in depth and space. These may include mass, volume, form, plane, light and texture. Such elements and concepts can be articulated through additive, subtractive, and/or fabrication processes. A variety of approaches, such as: representation, abstraction, and expression may be part of the student's portfolio. These might include traditional sculpture, architectural models, apparel, ceramics, 3D fibre arts or metalwork.

AP AFRICAN AMERICAN STUDIES 12

This is an interdisciplinary course that examines Black cultures, experiences, histories, and resistance movements from early African kingdoms, to issues and movements today. The course begins by looking at African kingdoms in places like Mali, Ghana, and North Africa. It then looks at freedom, resistance, and enslavement movements that were consequences of imperialism and colonialism. The last units look at Black resistance, art, culture, music, and movements that connect to Black identity, freedom, struggle, and liberation. This is an exciting course where students will engage with multiple source materials, examine different cultural artifacts and evidence pieces, and have a chance to complete an independent inquiry project on a topic of their choice. This is an excellent entry point into AP coursework and students from all academic backgrounds are encouraged to take this course.

AP BIOLOGY 12

The AP Biology course, with a strong inquiry-based lens, provides students with the content of an introductory first-year level biology course. The key concepts and related content that define the revised AP Biology course are organized around 4 Big Ideas: the process of evolution drives the diversity and unity of life; biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis; living systems store, retrieve, transmit and respond to information essential to life processes; and biological systems interact, and these systems and their interactions possess complex properties. Students, via science practices, develop critical thinking, and reasoning skills, as they curate their understanding of the characteristics of living things.

AP CALCULUS 12 AB

AP Calculus is a university level calculus course. This course is intended for students who have completed Pre-Calculus 12. The three big ideas for the course are: Limits, Differentiation, Integration, and their applications. The pre-requisites for this course are Pre-Calculus 11 and 12.

AP CHEMISTRY 12

The AP Chemistry course provides students with a foundation to support future advanced course work in chemistry. Through inquiry-based learning, students develop critical thinking and reasoning skills. Students cultivate their understanding of chemistry and science practices as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

AP COMPUTER SCIENCE A

The course AP Computer Science A is designed to introduce students to Object Orient Design and its implementation in Object Orient Programming. The course will be delivered, and exams evaluated in Java Programming Language. Prior coding experience is not necessary as we will build our knowledge from the foundations moving towards mastery. The topics included: binary, octal, and hexadecimal numbers; primitive and non-primitive data types; control structures; common Java library resource, arrays and 2D arrays, objects and object-oriented design and decomposition; ArrayList and 2D ArrayLists; recursion; and sorting algorithms.

AP ENGLISH LITERATURE & COMPOSITION 12

The AP English Literature and Composition is a rigorous, college-level course similar in content and expectations to a first-year university course. Students will read challenging, stimulating literary texts from a variety of genres and time periods, will hone their analytical skills, and will learn to write with sufficient richness and complexity to communicate effectively with mature readers of literature. As they read and write, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism.

AP ENVIRONMENTAL SCIENCE 12

The AP Environmental Science course is designed to be the equivalent of a one semester introductory college course in environmental science. Topics include earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change. *Completion of Chemistry 11 and Life Sciences 11 is recommended.*

AP HUMAN GEOGRAPHY 12

This course is designed to help students understand the interconnected relationship between humans and the natural environment. Students will study topics like population, migration, language, world religions, geopolitical conflicts, urban studies, and economic development. They also learn about the sophisticated technology and tools geographers use to investigate and organize data and information. Students will investigate case studies and currents events from around the world and engage in field experiences and experiential learning. Students receive 8 credits for this course, alongside Human Geography 12.

*AP MACROECONOMICS 12 (offered 2025-2026)

AP Macroeconomics is designed to give you 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 your familiarity with economic performance measures, economic growth, and international economics. Students will explore concepts such as measures of economic performance, macroeconomic theory and policies, and international economics.

*AP MICROECONOMICS 12 (offered 2026-2027)

The purpose of the AP course in microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the 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.

AP PHYSICS I - 12

Physics 11 HONOURS and AP PHYSICS 1 (students must choose both) This program is designed to cover both semesters so students must request both courses. The two courses cover the objectives of Physics 11 and 12 as well as additional material for Advanced Placement.

Advanced Placement (AP) Physics I course requires an intensive study in a range of physics topics including Kinematics (linear and rotational), Forces and Torque, Energy, Linear and Angular Momentum, Electrostatics, Current Electricity, Waves, Simple Harmonic Motion, and Fluid Systems in Static Equilibrium and in Motion. This course demands motivated students who are enthusiastic to address the material quickly and who will complete independent study on the concepts. Fluency in the language of math is critical in this course as equation manipulation and trigonometry will be used regularly. There is an opportunity to complete an AP Exam associated with AP Physics I.

AP PHYSICS II - 12

Advanced Placement (AP) Physics II is an intensive study of Thermodynamic Systems; Electric Forces, Field, and Energy; Current Electricity; Electromagnetism; Geometric and Physical Optics; Quantum, Atomic, and Nuclear Physics; and Radioactivity. This course may be pursued after AP Physics I or Physics 12, upon recommendation by a physics teacher. This course demands motivated students who are enthusiastic to address the material quickly

and who will complete independent study on the concepts. Fluency in the language of math is critical in this course as equation manipulation and trigonometry will be used regularly. There is an opportunity to complete an AP Exam associated with AP Physics II. Students successfully completing the AP Physics I and AP Physics II can get credit to University Introductory Physics courses.

AP PSYCHOLOGY 12

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental process. While considering the studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomenon associated with major units of study, including biological basis of behavior, cognition, development, learning, social psychology, personality, and mental and physical health. Throughout the course, students apply psychological concepts and employ psychological research methods and data interpretation to evaluate claims, consider evidence, and effectively communicate ideas. Students in AP Psychology will learn about theories that apply to themselves, their relationships, the influence of peers, how technology and stress impact the brain, parenting styles, how one's environment shapes personality and many other aspects of human, societal and cultural behaviour.

AP STATISTICS 12

In colleges and universities, a large number of students take a statistics course. Courses similar to AP Statistics are required for study in such fields as business, the social sciences, and health sciences. Knowledge of statistics is required for students intending to do research. AP Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This course is open to students who have completed Foundations & Pre-Calculus Math 10 and can thoughtfully analyze and explain data and ideas.