2025 - 2026 COURSE DESCRIPTIONS

GRADES 8 - 12

ECOLE ALPHA SECONDARY

930 Alpha Avenue

Burnaby, BC, V5C 3E2

https://alpha.burnabyschools.ca/

January 2025

Welcome to École Alpha Secondary School, Home of the Eagles!

The Alpha administration, counsellors, and teachers hope that you will find this Course Descriptions Guide helpful as you plan your next year's educational program.

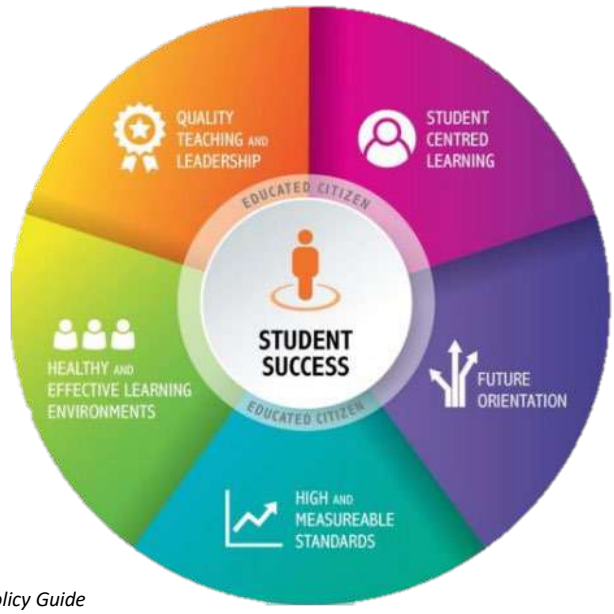
In selecting your courses of study, give consideration as to how each course will be of benefit to your total program. Consider not only next year, but also subsequent years and ultimately what post-secondary or career path you may wish to pursue.

Your counsellors have the knowledge and expertise to guide you in the planning process. Bear in mind that the final responsibility for selection of a suitable program rests with you and your parents/guardians. Students in Grades 10, 11 and 12 must choose courses which meet the minimum graduation requirements set by the BC Ministry of Education.

The staff at Alpha are readily available to assist you and your parents in any way we can. It is our goal to create a positive learning environment, one that enables and encourages you to pursue excellence, experience success and realize your potential. Remember that regular attendance, punctuality, and good work habits are essential to success.

We look forward to working with you and best wishes for a successful school year!

École Alpha Admin Team



**Educated Citizen: Graduation Policy Guide*

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BC CURRICULUM FEATURES

CURRICULUM MODEL

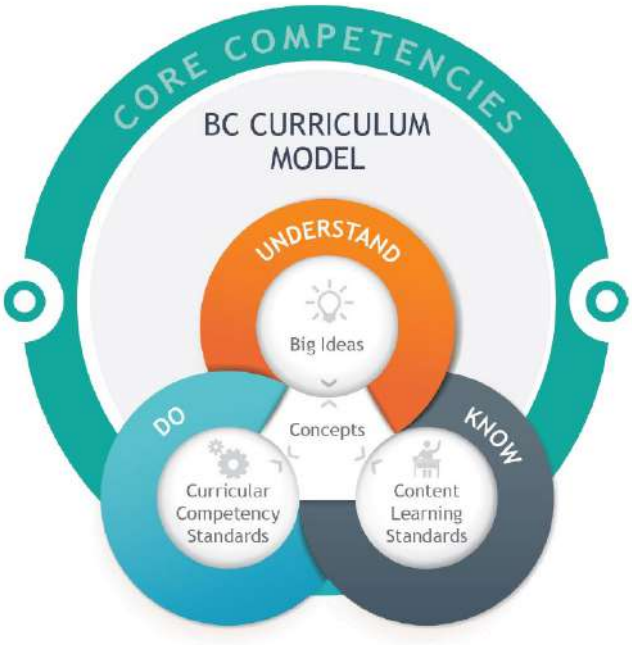
All areas of learning are based on a "Know-Do-Understand" model to support a concept-based competency-driven approach to learning. These three elements, the Content (Know), Curricular Competencies (Do), and Big Ideas (Understand) all work together to support deeper learning.

Content (Know)

The content learning standards — the "know" of the know-do-understand model of learning — detail the essential topics and knowledge at each grade level.

Curricular Competencies (Do)

The curricular competencies are the skills, strategies, and processes that students develop over time in a specific area of learning. They reflect the "do" in the know-do-understand model of learning.



Big Ideas (Understand)

The big ideas consist of generalizations and principles and the key concepts important in an area of learning. They reflect the "understand" component of the know-do-understand model of learning. The big ideas represent what students will understand at the completion of the curriculum for their grade. They are intended to endure beyond a single grade and contribute to future understanding. For more information: https://curriculum.gov.bc.ca/

CORE COMPETENCIES

The Core Competencies are sets of intellectual, personal, and social and emotional proficiencies that all students need in order to engage in deep, lifelong learning. Students develop Core Competencies when they are engaged in the "doing" – the Curricular Competencies – within a learning area. As such, they are an integral part of the curriculum. While they manifest themselves uniquely in each area of learning, the Core Competencies are often interconnected and are foundational to all learning. For more information: https://curriculum.gov.bc.ca/competencies

INDIGENOUS PERSPECTIVES & KNOWLEDGE

Indigenous perspectives and knowledge are an important part of the historical and contemporary foundations of both B.C. and Canadian societies and are integrated into every subject in the new curriculum. All students will have opportunities to better understand and respect a variety of Indigenous cultures and worldviews, while also learning more about their own cultural backgrounds and identities.
For more information: https://curriculum.gov.bc.ca/

GRADE 8 & 9 PRE-GRADUATION PROGRAM OVERVIEW

The Grade 8 and 9 programs are a continuation of the Kindergarten - Grade 7 program. Grade 8 and 9 are the final foundation layers of preparation for the Grade 10-12 Graduation Program.

GRADE 8 PROGRAM

Grade 8 students are required to take the following courses:

English 8	Social Studies 8	Math 8
Science 8	French 8	Physical & Health Education 8

One Fine Arts Elective from the following options: Art 8, Drama 8, Dance 8, Band 8 (Beginners' or Intermediate)

One Applied Design, Skills & Technologies 8 Elective from the following options: Home Economics 8/Technology Education 8, Digital Literacy 8/Media Arts 8

Students who require more support to be successful may have a different program developed by the Learning Support teacher, the student, and parent/guardian.

GRADE 9 PROGRAM

The Grade 9 program is a continuation of the Grade 8 program and focusses on skill building in all the areas of learning.

Grade 9 students are required to take the following courses:

English 9	Social Studies 9	Math 9
Science 9	Physical & Health Education 9	

Grade 9 students must also select ***3 elective courses***. Students who require more support to be successful may have a different program developed by Learning Support Staff in collaboration with the student, and parent.

GRADUATION PROGRAM 10 – 12

The BC Graduation Program provides students in Grades 10 to 12 to explore and discover possibilities for their future. For the most part, students will be able to take courses that interest them & select the choose that best reflects their goals.

In order to graduate with a Dogwood Diploma, every student is required to complete:

- At least 80 credits total (52 required credits + 28 elective credits)
- Three stand-alone provincial assessments: Numeracy in Grade 10 and Literacy in Grades 10 and 12
- 8 credits of Career Education across two courses
- 4 credits of Indigenous-focussed coursework (English or Social Studies) in Grade 10, 11, or 12

2025 GRADUATION PROGRAM PLANNER

(for students in grades 10 and 11 only)

Foundation (Core) Courses

Required Courses		Credits
a Language Arts 10**		4
a Language Arts 11**		4
a Language Arts 12**		4
a Mathematics 10		4
a Mathematics 11 or 12		4
a Social Studies 10**		4
a Social Studies 11 or 12**		4
a Science 10		4
a Science 11 or 12		4
a Fine Arts and/or Applied Skill 10, 11 or 12		4
Physical and Health Education 10		4
Career Life Education 10		4
Career Life Connections 12		4
	Foundation Total	**52**

Elective Courses

Elective Courses		
Student must complete at least 28 elective credits from Grade 10-12 courses.	**Elective Total**	**28**
Overall Credits Needed to Meet Grad Requirements	**Total Credits**	**80**

*Of the 80 credits for graduation, **at least 16 must be at the Grade 12 level**, including a Grade 12 Language Arts course. Others may be required or elective courses.

All students working towards a B.C. Certificate of Graduation must successfully complete **at least 4 credits of Indigenous focused coursework. This can include English First Peoples 10-12, BC First Peoples 12 or Contemporary Indigenous Studies 12.

Graduation Assessments

Current Grade 10 Students	Current Grade 11 Students	Current Grade 12 Students
Numeracy Assessment 10 Literacy Assessment 10	*Numeracy AND Literacy Assessment 10 is required (if not already written).*	Literacy Assessment 12 * Littératie – Français langue seconde 12 (French Immersion) *Numeracy AND Literacy Assessment 10 is required (if not already written).*

EXTERNAL COURSES

A ministry-accepted External Course is a Ministry-Authorized course that has an organized set of learning activities developed or offered outside the British Columbia School system and set out in Schedule 4 of the Graduation Requirements Order. Students receive graduation credit for successfully completing an External Course. These courses are of an equivalent standard to other Ministry-Authorized senior secondary courses.
Some Examples:

1) Second Language
2) Music/Dance
3) Provincial or National Athletics
4) Cadets, 4-H, Occupational Programs
5) ICBC Driver Education

** For more information on external courses see your counsellor.

LEARNING SUPPORT SERVICES

CONNECT PROGRAM

The Connect Program is the Learning Support Services program with the widest scope. Connect is available before school, during lunch, and during regular class time. We try to staff every period with a Humanities and a Sci-matics specialist to support students in their learning.

PRE-EMPLOYMENT PROGRAM

The aim of this program is to provide students with the broadest range of skills, experiences and knowledge to become as "work-ready" as possible. After completing their grade 12 year, students receive a school-leaving certificate (Evergreen). The program curriculum encompasses:

- practical life skills (community safety, transit training, consumer skills, etc.)
- job skills (work habits, school jobs, career awareness, work experience, etc.)
- social skills (inclusion in elective classes, communication, emotional regulation, social skills training)
- academics (individualized Math and Language programs based on individual abilities and needs, with an emphasis on practical life applications)

ACCESS PROGRAM

Access provides support for exceptional learners. The program provides a wide range of supports throughout a student's high school years. Individualized programs are designed in consultation with teachers, parents/guardians, educational assistants and outside agencies. The program focusses on:

- independent living skills, including self-care & self-management skills
- behaviour management, social skills, and communication
- daily physical activity, including PT and OT in consultation with the Children's Health Services Resource Team (CHSRT)
- functional literacy and numeracy skills
- inclusion in elective classes

After completing their grade 12 year, students receive a school-leaving certificate (Evergreen).

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.

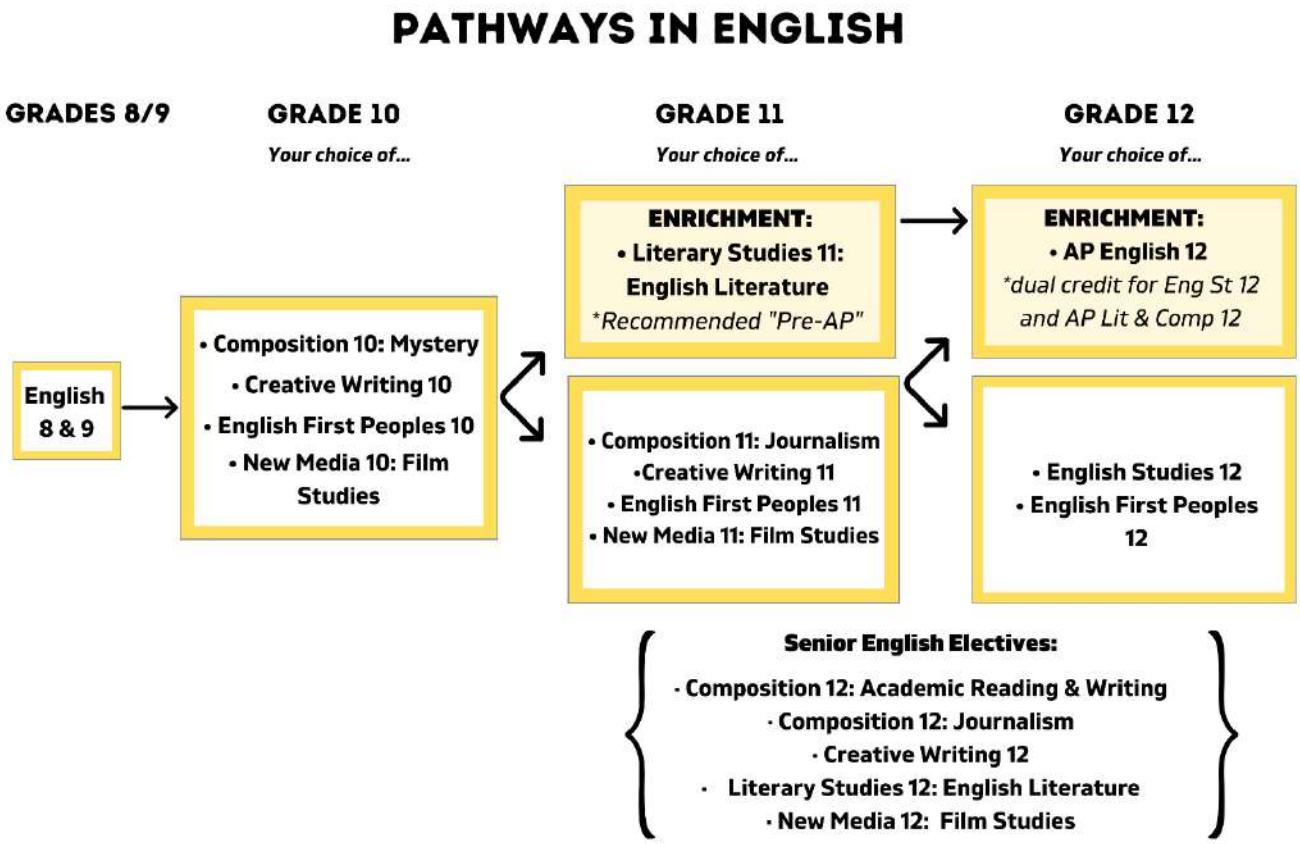
AP PSYCHOLOGY 12

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.

ENGLISH LANGUAGE ARTS



For more information, please see the English website at: http://blogs.sd41.bc.ca/alpha-english/

ENGLISH 8

English Language Arts 8 is a foundational curriculum that equips students with the language and literacy skills they will need for success in school, community, career, and life. It provides students with the opportunity to become effective communicators, to develop and express their own ideas, and to think deeply and critically about the ideas of others.

Through their study of language and texts, students have opportunities to develop a lifelong love of reading, writing, and learning and an appreciation for the power, beauty, joy, and artistry of language and texts. As they explore and create written, oral, and visual texts, students expand and deepen their understanding of both real and imaginary worlds, gaining insight into their own lives and the lives of others.

The English 8 curriculum is designed to empower students to become thoughtful, ethical, and responsible citizens of a diverse society. As they explore texts, students come to understand the influences shaping the condition and, more specifically, Canadian society and the unique contribution of First Peoples to our country and province.

Through the study of a variety of texts and worldviews, including First Nations' literature, students gain awareness of the human condition and themes; this includes historical and contemporary contexts of First Peoples, which will lead to mutual understanding and respect.

(Adapted from https://curriculum.gov.bc.ca/curriculum/english-language-arts/goals-and-rational)

The English 8 curriculum allows students to explore the following BIG IDEAS:

- Exploring stories and other texts helps us understand ourselves and make connections to others and to the world.
- People understand text differently depending on their worldviews and perspectives.
- Texts are socially, culturally, and historically constructed.
- Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.
- Language and text can be a source of creativity and joy.

ENGLISH 9

The English 9 curriculum continues to build upon the curricular competencies introduced in English 8. Using oral, written, visual, and digital texts from a variety of genres, students will individually and collaboratively continue to practice their comprehension and communication skills.

The English 9 curriculum allows students to explore the following BIG IDEAS:

- Language and story can be a source of creativity and joy.
- Exploring stories and other texts helps us understand ourselves and make connections to others and to the world.
- People understand text differently depending on their worldviews and perspectives.
- Texts are socially, culturally and historically constructed.
- Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

ENGLISH ENRICHMENT

Enrichment opportunities designed to inspire, challenge, and stretch students who demonstrate strong work ethic, passion, and ability exist in each English classroom and also in the school at large.

School-wide English enrichment opportunities include, but are not limited to:

- Writing and recitation contests.
- Workshops, visiting speakers and writers, performers.
- Clubs like Debate Club, Senior Book Club, and Photojournalism.
- Alpha Reads.

In the senior grades, as students become mature and sure of their interests, they may elect to challenge themselves with **specific enrichment (pre-AP and AP) courses.**

ENGLISH LANGUAGE ARTS 10

The aim of English Language Arts is to provide all students with opportunities for personal and intellectual growth using all forms of communication to make meaning of the world and to prepare them to participate effectively in all aspects of society.

ALL STUDENTS WILL COMPLETE 4 CREDITS TOTAL OF ENGLISH LANGUAGE ARTS.

COMPOSITION 10: MYSTERY

Crime, murder mysteries, whodunits—detective fiction has been hugely popular since its inception. These stories challenge the reader to try to solve the mystery on their own and entertain us by showing off the deductive skills of talented investigators. We will read key stories in the genre from the proto-detective *Oedipus the King* to the birth of detective fiction proper in Edgar Allan Poe and its development through Arthur Conan Doyle, Agatha Christie, Raymond Chandler and noir movies, all the way up to the present day. The course will include plays, short stories, novels, poetry, film and TV. Students will gain an appreciation of genre and literary history while developing their skills in literary analysis. This course provides credit for **Literary Studies 10** and **Composition 10.**

CREATIVE WRITING 10

This course is designed for students who have an interest in creative expression through language. Students will sharpen their skills as literary artists through the exploration of identity and story in a wide range of genres. Within a supportive community of writers, students will collaborate and develop their skills through writing and design processes that encourage students to reflect on, extend, and refine their writing. Possible areas of focus include contemporary creative forms such as slam poetry, oratory, rap, drama, song, and graphic novels; creative non-fiction, historical fiction, poetry, song lyrics; multimodal creative forms that combine visual, written, and oral texts. This course provides credit for **Creative Writing 10** and **Composition 10.**

ENGLISH FIRST PEOPLES 10

This course is open to all students and designed for those who are interested in exploring contemporary texts from outside traditional reading lists and responding to texts in *and beyond* the written word. With an emphasis on oral self-expression and communication in a variety of contexts, Students who take this course will also strengthen their oral language proficiencies. EFP 10 provides credit for **Literary Studies 10** and **Spoken Language/New Media/ or Composition 10**.

NEW MEDIA 10: FILM STUDIES

This course combines the traditional study of literature with a relatively new art form: film. Students will be introduced to texts, both literary and visual, from a variety of genres, time periods, styles, and writers/directors. As movies are visual narratives, students will learn to interpret film as they would a short story, novel, play or poem in daily Socratic Seminar discussions. Many of the projects will have an oral communication element, where oral skills will be assessed. Like all English Language Arts courses, this class will help to develop reading/viewing comprehension and writing with an emphasis on communication skills. This course provides credit for **New Media 10** and **Spoken Language 10.**

ENGLISH LANGUAGE ARTS 11

One 4-credit Grade 11 Language Arts Course is required for graduation. Additional English course(s) may be taken as elective(s). Grade 12 versions of the classes listed below are electives, and they do NOT meet the Language Arts 12 graduation requirement.

COMPOSITION 11: JOURNALISM

Composition 11: Journalism (previously New Media 11: Lab) is a hands-on, real-world exploration of media in the online age. We run an actual media website, producing engaging content for a general audience. We learn vital skills for the fast-paced digital world. Highlights include studying and imitating actual media websites online; self-selected topics including sports, gaming, beauty, music, style, technology etc. in a writing workshop to produce high quality work for publication; selecting work roles within our organization including social media strategy, graphic design and illustration, and editorial leadership; using blogging and wiki sites; and keeping up-to-date on topics of current interest.

CREATIVE WRITING 11

This course is designed for students who have an interest in creative expression through language. Students will sharpen their skills as literary artists through the exploration of identity and story in a wide range of genres. Within a supportive community of writers, students will collaborate and develop their skills through writing and design processes that encourage students to reflect on, extend, and refine their writing. Possible areas of focus include poetry, memoir writing, script writing, journaling, and short stories.

ENGLISH FIRST PEOPLES 11

This course is open to all students and designed for those who are interested in exploring contemporary texts from outside traditional reading lists and responding to texts in *and beyond* the written word. With an emphasis on oral self-expression and communication in a variety of contexts, Students who take this course will also strengthen their oral language proficiencies.

LITERARY STUDIES 11: ENGLISH LITERATURE (ENRICHED)

**recommended for students interested taking AP English Literature & Composition 12*

This course offers students the opportunity to experience the richness and variety of English literature, in its social, philosophical, and historical contexts. Reading widely is an important factor for an educated mind, and by reading works that are sophisticated in thought and style, students will strengthen their aesthetic and critical judgement. Any student who likes to read, discuss, and write about literature will love this class, but it is primarily valuable to students who are planning to study at university level and to enrichment students who wish to prepare for AP English Literature and Composition 12. The learning standards and levels of assessment for this course are the same as for a regular English 11 course.

NEW MEDIA 11: FILM STUDIES

This course combines the traditional study of literature with a relatively new art form: film. Students will be introduced to texts, both literary and visual, from a variety of genres, time periods, styles, and writers/directors. As movies are visual narratives, students will learn to consider and interpret film as they would a short story, novel, play or poem. Like all English Language Arts courses, this class will help to develop reading/viewing comprehension with an emphasis on communication skills.

CULTURAL EMPOWERMENT THROUGH LANGUAGE 11/12 (CEL)

This course is designed to build students' skills and confidence in academic tasks across the curriculum and ability to apply their growing range of strategies. It is meant to extend the exploration and practice of ELL students into the four main English language skills of reading, writing, listening and speaking. CEL will help students gain awareness of their own identify and cultural contributions to Canadian culture and society through literature. **Cultural Empowerment Through Language 11** is a **4-credit course** and counts towards graduation. This course is designed for students who:

- are in ELL level 3/4
- are multilingual
- want to further practice their English speaking, listening, reading and writing in order to achieve greater academic success
- want to share their own lived experiences to enrich a diverse Canadian culture and community

ENGLISH LANGUAGE ARTS 12

One of the following Grade 12 Language Arts courses is required for graduation. All other English 12 courses are electives and will NOT fulfill the graduation requirement.

ENGLISH STUDIES 12

English Studies 12 builds on and extends students' previous learning experiences in ELA 10 and 11 courses. It is designed for all students and provides them with opportunities to refine their comprehension and communication skills; to explore texts from a variety of sources and genres; to deepen their understanding of themselves and others in a changing world; to contribute to Reconciliation by building greater understanding of the knowledge and perspectives of First Peoples; to expand their understanding of what it means to be educated Canadian and global citizens.

ENGLISH STUDIES FIRST PEOPLES 12

This English Studies course is grounded in the First Peoples Principles of Learning and designed for all students, Indigenous and non-Indigenous, who are interested in delving deeply into First Peoples oral and written literature and visual texts in a range of media. The course focuses on the experiences, values, beliefs, and lived realities of First Peoples in Canada; however, the voices and perspectives from First Peoples throughout the world may also be considered. **English First Peoples 12 is the academic equivalent of English Studies 12 and fulfills the English 12 Graduation Requirement.**

AP ENGLISH LITERATURE & COMPOSITION 12 (8 credits) **The AP exam is optional*

This course is a rigorous, college-level program 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. English Literature 11 Enriched is the recommended, but not mandatory, prerequisite course. AP English 12 prepares students for both the AP English Literature and Composition exam and the provincial literacy assessment. **This course is equivalent to 8 credits – 4 credits for English Studies 12 and 4 credits for Advanced Placement English.**

SENIOR ENGLISH ELECTIVES

COMPOSITION 12: ACADEMIC READING & WRITING 12

Many first-year students in post-secondary institutions find the reading load and level they encounter, as well as the writing standards expected of them, rather overwhelming. As a result, students often find the academic transition between high school and university, or college can a difficult one. Academic Reading & Writing 12 is a course designed to "bridge the gap" between English 12 and the literacy skills required in first year college/university programs. The main objective is to improve students' reading and writing skills in all academic areas, including the Arts-based disciplines (English, History, Political Science, Sociology, etc.), Psychology, Business, the Sciences, and others.

CREATIVE WRITING 12

This course is designed for students who have an interest in creative expression through language. Students will sharpen their skills as literary artists through the exploration of identity and story in a wide range of genres. Within a supportive community of writers, students will collaborate and develop their skills through writing and design processes that encourage students to reflect on, extend, and refine their writing. Possible areas of focus include poetry, memoir writing, script writing, journaling, and short stories.

LITERARY STUDIES 12: ENGLISH LITERATURE

English Literature is a fun, enriching class for students interested in exploring literature, philosophy, and history. It offers students curious about the classics the opportunity to read some of the most inspiring, witty, and wise texts written in English over the past 2000 years. In this course, students will develop a critical appreciation for the richness and variety of English literature in its social and historical contexts.

NEW MEDIA 12: FILM STUDIES

Film is a young but undeniably spectacular and popular storytelling tool. Films, like good books, give us the ability to transcend place and time and explore different worlds. In this introduction to visual storytelling, students will view and discuss films from a variety of genres, styles, time periods, and writers/directors. Film Café will help students develop their critical thinking and communication skills as well as an appreciation for artistic expression.

NEW MEDIA 12: JOURNALISM

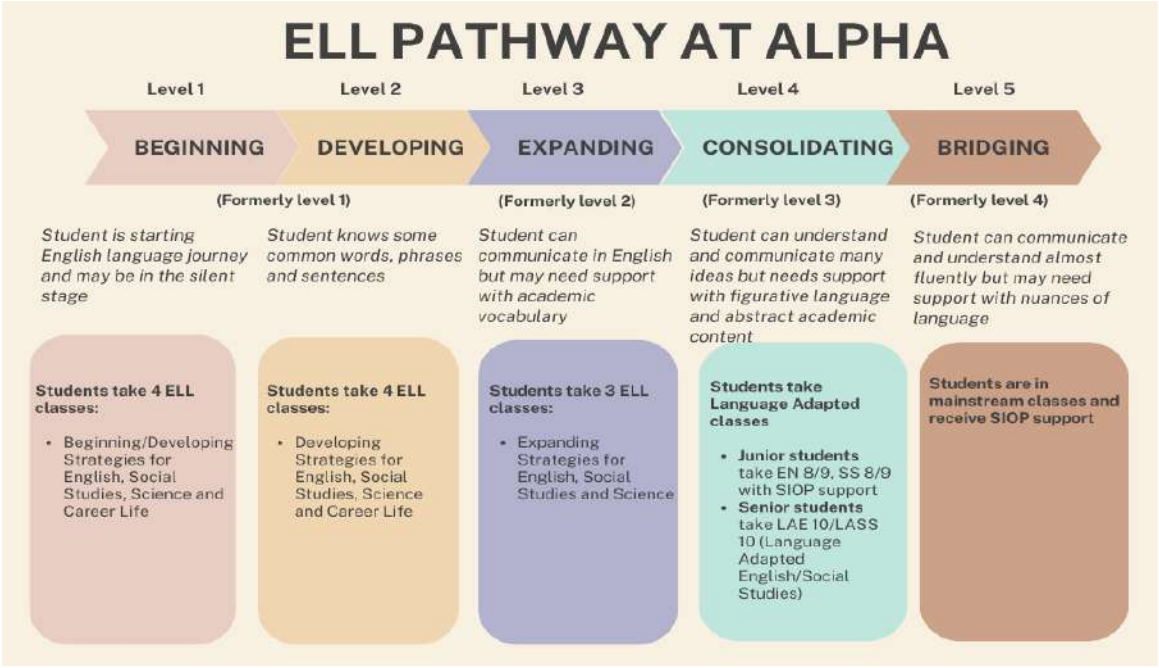
New Media 12: Journalism is a hands-on, real-world exploration of media in the online age. We run an actual media website, producing engaging content for a general audience. We learn vital skills for the fast-paced digital world. Highlights include studying and imitating actual media websites online; self-selected topics including sports, gaming, beauty, music, style, technology etc. in a writing workshop to produce high quality work for publication; selecting work roles within our organization including social media strategy, graphic design and illustration, and editorial leadership; using blogging and wiki sites; and keeping up to date on topics of current interest.

ELL (ENGLISH LANGUAGE LEARNING)

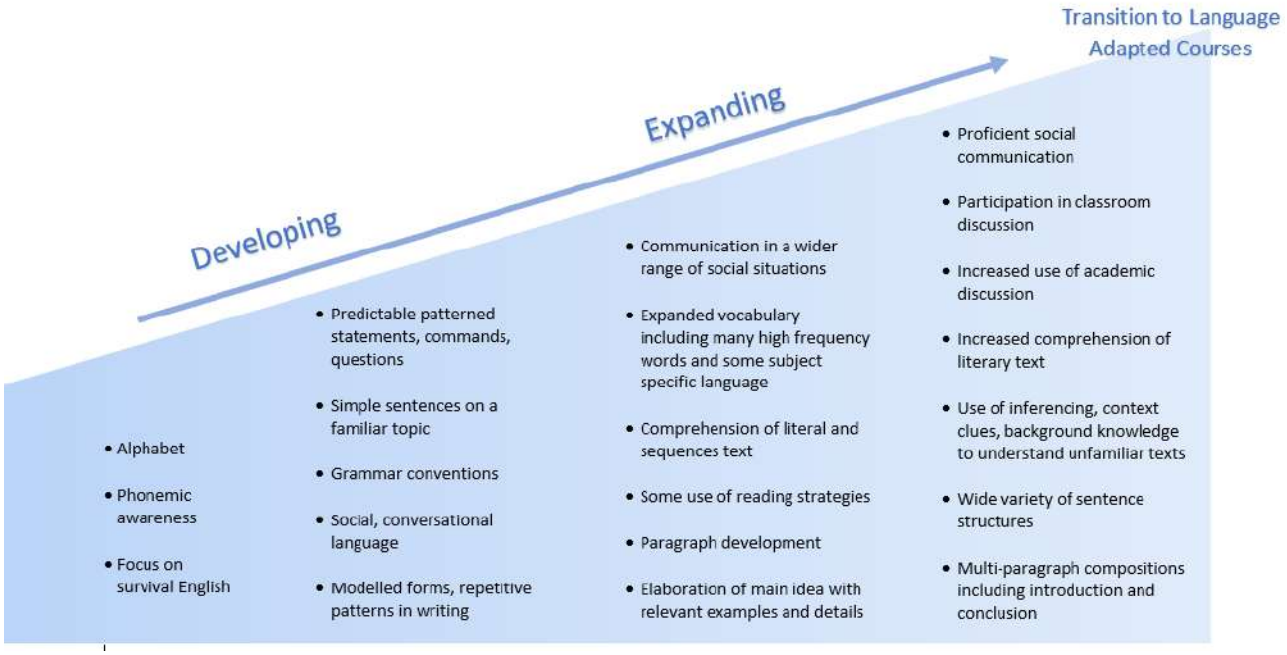
The ELL program supports English Language Learners in Grade 8 - 12 in acquiring social and academic language skills.

- **Social Language Skills:** important for daily communication with teachers, peers and community members
- **Academic Language Skills:** important for reading, writing, comprehending, expressing and interacting with content-specific materials

Newcomers arriving in Canada will settle and integrate into our school community by attending the ELL program and elective courses. Language acquisition is a journey and our ELL teachers aim to support our students in building a strong language foundation in order to successfully transition into academic courses.



TYPICAL PATTERN OF MOVEMENT THROUGH ELL LEVELS



LANGUAGE ADAPTED LITERARY STUDIES 10

While continuing to develop their proficiency in English, students will work towards meeting the outcomes of the English 10 curriculum. Students will develop a large vocabulary with which to express their ideas effectively and will be expected to write about and discuss literature in an increasingly critical and sophisticated manner.

SOCIAL STUDIES 10: LANGUAGE ADAPTED

While developing their proficiency in English, this course acquaints students with Canadian geography, history, government, law, culture, customs and current events. In addition, it allows students to explore Canada's role in the global community. A wide range of strategies will be used to teach students how to access, comprehend and process information and communicate their understanding through writing and oral presentations.

SOCIAL STUDIES

Social Studies is an interdisciplinary subject area that includes History, Geography, Political Studies, Law and Human Rights studies, Philosophy, Social Justice, and Comparative Cultures. We also work hard to incorporate Indigenous worldviews, perspectives, cultures, and histories into our curriculum, as we help students better understand and identify their role in reconciliation and decolonization. Students learn in hands-on, experiential ways, as they get to know their local place and history on a deeper level, as well as current events.

Students must take Social Studies 8, 9, and 10, and then are able to choose from any senior electives that interest them. Please note that BC First Peoples 12 meets the Indigenous Graduation Requirement.

SOCIAL STUDIES 8

In this foundational course, students will examine the rise and fall of several major civilizations while developing their understanding of diverse cultures from around the world. Students will examine the development of civilizations and cultures from the 7th century to 18th century including those in Europe, Latin America, Africa, and Southwest and East Asia through the Silk Road. Themes such as imperialism, militarism, expansion, and colonization will be used to address political, social and cultural change, and to explore the relationship between humans and the natural environment. Students will develop their ability to assess documents (writings, drawings, records), to research and investigate through inquiry, to think critically and creatively, and to work successfully in diverse groups.

SOCIAL STUDIES 9

Students will study how emerging ideas and ideologies changed the landscape of Europe, North America and around the globe, impacting political, social and economic landscapes. Global revolutions and rebellions are a major topic of interest, and we will examine the ways in which these impacted different social groups. Migration and colonization will be further explored, as well as its impact these had on First Peoples cultures and worldviews. Students will analyse how Canadian economic, political, and social development is influenced by the physical environment and physiographic regions, while also looking at the development of Canada as a nation. Students will study the first fifty years after Confederation, and how that impacted our relationship with First Peoples, as well as American and European contacts. This content is interwoven with the key skills students will need to look critically at our changing world, such as document analysis, map interpretation, synthesizing ideas and defending opinions.

SOCIAL STUDIES 10

Social Studies 10 is an important and engaging course that is divided into the study of politics, 20th century global history, and human and physical geography. Students will build on skills learned in grade 8 and 9 to develop a greater understanding of more difficult and abstract ideas that have impacted Canada over the last one hundred years. Many of the problems of the modern world, such as climate change, economic disparity, and political and social turmoil are examined through our study of key changes in the 20th century. Students will study political institutions and ideologies, First Peoples self-governance, and the global struggle for human rights. Students will look at global affairs including World Wars, the Cold War, and decolonization and resistance movements. Last, students will examine issues related to demography, economic inequality, living standards around the world, and the interaction between humans and the environment.

SOCIAL STUDIES ENRICHMENT OPPORTUNITIES

Throughout the junior and senior curriculum, students will be invited to partake in various opportunities Enrichment opportunities designed to inspire, challenge, and stretch students by exposing them to different perspectives, worldviews, and experiential learning activities.

School-wide Social Studies enrichment opportunities include, but are not limited to:

- Workshops and visiting speakers, artists, and performers
- School clubs like Model United Nations and Social Justice groups
- Field Experiences

In the senior grades, students may elect to challenge themselves with **specific enrichment AP courses.**

SENIOR SOCIAL STUDIES ELECTIVE COURSES

Senior electives in Social Studies are open to any students upon completion of Social Studies 10 and have no pre-requisites. The course offerings are designed to allow students to pursue various strands and disciplines of Social Studies. Students are encouraged to explore areas of interest from their junior studies.

EXPLORATIONS IN SOCIAL STUDIES 11

Explorations 11 is an introduction to the different senior electives that are offered in Social Studies. The course will focus on three to four topics of interest including Social Justice, Political Studies, and Environmental Issues. Students will look at issues related to equity and diversity and learn about issues and problems facing communities around the world. They will also look at the history of political thought and ideologies, as well as different governments systems around the world. Last, students will look at the basics of physical and human geography, including a study of pressing environmental issues facing both humans and the natural world.

20th CENTURY WORLD HISTORY 12

This course looks at the major events of the 20th century, from a global perspective and lens. Students will look at global conflicts, events, and cultural movements beginning in World War I, and continuing on to today. Students will use inquiry and critical thinking skills to compare and contrast the different impacts on religion,

culture, and society that arose as a result of these conflicts, and how human rights, social inequity, and religious persecution resulted from many of the authoritarian regimes that arose in the last 100 years. Students will also look at the impact technology and globalization has had on the world and its people.

BC FIRST PEOPLES 12

This is a **hands-on, experiential course** where students will have field trips and engage with Indigenous Knowledge Keepers and Elders as students learn more about the cultures of First Peoples in B.C. and around the world. We will explore how Indigenous cultures are renewed, sustained, and transformed through their connection to land through topics that related to Indigenous identities, worldviews, artforms, and languages. Last, we will study the past and current impacts of colonialism, as well as the diversity and resiliency of First Nation through study of resistance, decolonization, and cultural revitalization. Students will consider multiple perspectives regarding community development and consider ways that Indigenous traditional knowledge and worldviews can help guide us forwards in this changing world. **This course meets the Indigenous-focused coursework requirement.**

GENOCIDE STUDIES 12

This course looks at the causes, events and impacts of genocide through the study of historical and contemporary case studies. Students will explore the social, political, economic, and cultural conditions for genocide to occur and how those spheres are impacted by the intentional attempt to eradicate groups of people. Students will look at genocide from multiple perspectives and lenses, and critically assess why such events take place despite active attempts to prevent them. Global and regional influences will be examined, with the goal of seeing that local conflicts often involve or influence on a much larger scale the Earth as a whole; the impact of technology on the size and scale of genocide will also be examined.

HUMAN GEOGRAPHY 12 / AP HUMAN GEOGRAPHY

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 can receive 8 credits for this course by also taking AP Human Geography 12.**

LAW STUDIES 12

The course will provide a comprehensive introduction to law and the legal process, particularly as they relate to the Canadian and Indigenous justice systems. In addition to discussing the basic components of the law, the course will explore some of the major legal issues facing Canadians, including the parole system, young offenders and juvenile justice, and constitutional rights under the Charter. Field trips, guest speakers, films, and documentaries all add to the course. Students will analyze actual legal cases utilizing decision making techniques with their legal knowledge to determine case outcomes. Students will also look at the correctional system, and they will analyze the history of law in Canada as it pertains to such things as past social injustices, and ethical decision making.

PSYCHOLOGY 12 (*BAA Course)

Psychology 12 is a course on human behaviour and basic concepts in modern psychology. This course covers the five major psychological domains: methods, bio-psychological, cognitive, developmental, and socio-economic domain. This course is recommended for those students who have an interest in Psychology and wish to pursue

it further at a post-secondary institution. The focus of this course is to develop students' abilities with critical thinking, essay writing, research and experimental methods, academic reading, and oral presentations.

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.

URBAN STUDIES 12: ART, FILM, AND THE CITY

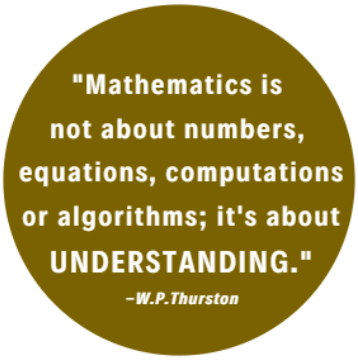
Students will start by examining how cities have impacted human life since urbanization began thousands of years ago, and the course will end with a study of "Cites of the Future". Over the course of the semester, students will look at the connection between cities and cultural expression – including art, food, resistance, and public spaces. We will look at the ways in which artforms, media and film showcase the development and dynamics of cities, as well as different ways that cities are managed and governed. We will also look at the ways in which cities can be centres for sustainable development and design. Students will engage in field trips and experiential learning throughout our local urban spaces, to bring the curriculum to life.

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.

MATHEMATICS

In grades K – 9, the math curriculum provides students with the opportunities to observe, learn and engage in mathematical thinking. Students will develop mathematical values and habits of mind, which go beyond numbers and symbols. These habits of mind help connect, create, communicate, reason, and solve problems.

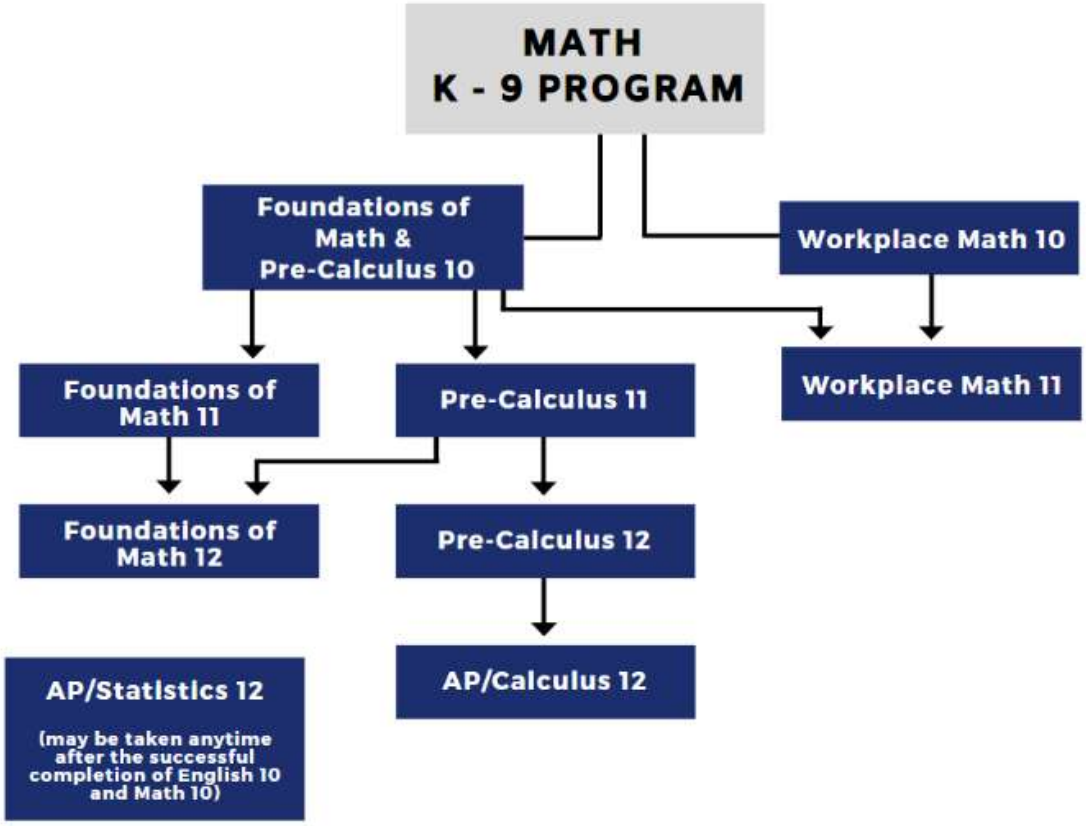


In the Graduation Program (gr.10 – 12) there are three Math Pathways. The goals of all three pathways are to provide prerequisite attitudes, knowledge, skills, rigor, and understandings for specific post-secondary programs or direct entry into the workforce. When choosing a pathway, students should consider their interests, both current and future. Students and parents are encouraged to research the admission requirements for post-secondary programs of study as they vary by institution and by year.

ENRICHMENT OPPORTUNITIES

Students who are passionate about mathematics will be given enrichment opportunities both in and out of the classroom. In-class enrichment opportunities include extensions to current curricular topics, puzzle games that require logical reasoning, contest preparation and problems of the week. Out of class enrichment opportunities include Math Challengers and participation in a wide variety of Math Contests.

PATHWAYS



**This pathway is designed to provide students with the mathematical understanding and critical thinking skills identified for entry into post-secondary programs that require the study of calculus such as Sciences, Engineering, and Commerce.*

WORKPLACE MATHEMATICS

This pathway is designed to provide students with the mathematical understanding and critical thinking skills identified for entry into some trades and for direct entry into the workforce.

FOUNDATIONS MATHEMATICS

This pathway is designed to provide students with the mathematical understanding and critical thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus (typically the Arts and Humanities.) **Foundations Math is only available at the grade 11 and 12 level.*

PRE-CALCULUS & CALCULUS MATHEMATICS

This pathway is designed to provide students with the mathematical understanding and critical thinking skills identified for entry into post-secondary programs that require the study of calculus such as Sciences, Engineering, and Commerce.

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MATHEMATICS 8

This is a year of consolidating basic mathematics skills; therefore, students must master all the learning outcomes. The course will provide students with the mathematical understandings and critical thinking skills so that they will be successful in future mathematics courses. Topics include: percent, proportional reasoning, powers and roots, rational numbers, Pythagorean Theorem, surface area and volume, discrete linear relations, two step equations, basic probabilities and statistics, and financial literacy. Problem solving will be incorporated into lessons throughout the year. In addition, algebra will be introduced at this level.

MATHEMATICS 9

This course introduces the topics that develop the framework for senior level courses in mathematics. The course will provide students with the mathematical understandings and critical thinking skills so that they will be successful in future mathematics courses. Topics include: operations with rational numbers, exponents, polynomials, linear relations, multi-step one variable equations, spatial proportional reasoning, statistics in society, and financial literacy. Problem solving will be incorporated into lessons throughout the year.

FOUNDATIONS & PRE-CALCULUS MATH 10

This course will prepare students for entry to either of the Foundation of Mathematics pathway or Pre-Calculus pathway starting in grade 11. The course will provide students with the mathematical understandings and critical thinking skills so that they will be successful in future mathematics courses. Topics include: powers with integral exponents, prime factorization, functions and relations, linear relations, arithmetic sequences, solving systems of linear equations, polynomials, right angled trigonometry, and financial literacy. Problem solving will be incorporated into lessons throughout the year.

WORKPLACE MATHEMATICS 10

This course provides students with the mathematical understandings and critical thinking skills identified for entry into the majority of trades at post-secondary and for direct entry into the work force. The Workplace Math curriculum allows students to explore the logic of mathematics through real-life applications of math. Topics include: computational fluency, interpreting and constructing graphs, primary trigonometric rations, metric and imperial measurement and conversions, solving problems involving surface area and volume, angles, experimental probability, measures of central tendency, and financial literacy.

FOUNDATIONS OF MATHEMATICS 11

This course is available to all students who have completed Foundations & Pre-Calculus 10. This is the second course in the Foundations pathway and will prepare students for entry to post-secondary programs which do not require Pre-Calculus (typically the arts, humanities, or social sciences). The course will provide students with the mathematical understandings and critical thinking skills so that they will be successful in future mathematics courses. Topics include: mathematical reasoning, relationships of angles, graphical representations of quadratic functions, graphical solutions to systems of equations, solving systems of linear inequalities, trigonometry, applications of probabilities and statistics, mathematics in research, and financial literacy.

PRE-CALCULUS 11

This is the second course in the Pre-Calculus pathway that further develops the mathematical skills necessary for the study of Calculus. It is intended for students whose future program of study will include Calculus. Topics include: real number system, powers with rational exponents, quadratic functions and equations, operations with rational and radical expressions, solving quadratic, rational and radical equations, polynomial factoring, linear and quadratic inequalities, trigonometry, and financial literacy.

WORKPLACE MATHEMATICS 11

Workplace Math 11 continues to develop the mathematical skills necessary for employment in the trades and general workplace. This curriculum allows students to explore the logic of mathematics through real-life applications of math. Topics include: computational fluency (through puzzles and games), statistics, 3D objects, linear relationships, slope as a rate of change, and financial literacy.

Note: Students who successfully complete **any of the ABOVE Math 11 courses have fulfilled their requirements for graduation.*

HISTORY OF MATHEMATICS 11

This course is a senior level elective math course geared toward students who are interested in learning about how mathematics has evolved over the centuries and how the global language of math is used to better understand the world. The course will examine how societal needs have influenced the development of mathematics and explore how tools and technology have been catalysts for this development. Topics include: number & number systems, patterns & algebra, geometry, probabilities & statistics, tools & technology and cryptography.

FOUNDATIONS OF MATHEMATICS 12

This is the third course of the Foundations pathway that further develops the mathematical skills necessary for post-secondary studies in areas that do not require the study of Calculus. In Foundations of Mathematics 12 students will explore topics such as: logical reasoning, probability and its application, permutations, combinations, functions (polynomial, exponential, logarithmic, and sinusoidal), and geometry and spatial relationships.

PRE-CALCULUS 12

This course builds on skills learning in Pre-Calculus 11 and further develops the mathematical skills necessary for the study of Calculus. Pre-calculus 12 is necessary to enter most post-secondary Science, Business and Engineering programs, with many requiring or recommending Calculus 12 as well. Topics include: trigonometry, transformations, exponential and logarithmic functions, rational functions and polynomials.

APPRENTICESHIP MATHEMATICS 12

This is the optional third course in the Workplace pathway. Apprenticeship Mathematics 12 is not a graduation requirement. This course continues to develop the mathematical skills necessary for employment in the trades and general workplace. This curriculum allows students to explore the logic of mathematics through real-life applications of math. Topics include: measurement, similar triangles including right angle trigonometry, 2D and 3D shapes and their measurements, isometric and orthographic projection, mathematics in the workplace and financial literacy.

CALCULUS 12

Calculus 12 will introduce the student to the fundamentals of differentiation and integration along with applications. Topics include: graphing, maxima and minima, related rates, areas, volumes and exponential functions. This course is an excellent introduction to university level Calculus. Students interested in post-secondary studies in Math, Business, Science, or Engineering should consider Calculus in preparation for post-secondary studies in these areas.

**** Calculus 12 may not be taken in place of Pre-Calculus 12.***

AP CALCULUS 12

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. Students should have successfully completed Pre-Calculus 11 and 12 prior to taking this course.

Students will cover similar topics to those taught in Calculus 12 but is taught at a faster pace than Calculus 12 due to the AP exam. It is expected that all students enrolled in the course will write the AP exam held in May for potential first-year university credit. Students not intending to write the exam should enroll in Calculus 12.

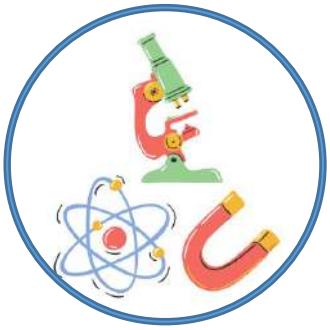
****AP Calculus 12 may not be taken in place of Pre-Calculus 12.***

AP STATISTICS 12

In colleges and universities, many students take a statistics course. Courses like 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. The AP exam is written in May for potential first-year university credit.

SCIENCES



Grade 8-10 science courses explore a range of topics from Biology, Chemistry, Physics, and Earth/Space Science. Our goals in Junior Science are to develop foundational Science knowledge and to build scientific thinking. Through hands-on and collaborative activities, students explore and develop their science skills: observing, questioning, experimenting, finding patterns in data, and connecting observations to theory. Development of key ideas, vocabulary, and numeracy skills lays the groundwork for future studies in science.

ENRICHMENT OPPORTUNITIES 8-10

Students who are deeply interested in the sciences and who are enthusiastic about exploring new can sign up for enrichment opportunities at their grade level. Students will engage with their grade level curriculum in their science class and will receive teacher support to pursue independent enrichment projects. Such projects could include a science fair or inquiry project, a novel study, a place-based activity, or a community project.

* If you are interested in **ENRICHMENT OPPORTUNITIES**, it is important to indicate this in your **COURSE REQUESTS** in **MyEd** when selecting your courses for next year.

SCIENCE 8

Science 8 uses models to explore scientific ideas. What's inside a cell? What are the building blocks that make up our world? How do waves behave? What causes earthquakes, volcanoes, and the landscape around us? Students learn to work safely in a laboratory setting as we explore these ideas together.

SCIENCE 9

Science 9 focuses on cycles and relationships. How and why do elements react with one another? Why do different species reproduce in different ways? How do cell processes support reproduction? How can we build and adjust electrical circuits? How do human actions impact our environment? Explore the cause & effect relationships in the world around us.

SCIENCE 10

Science 10 focuses on conservation: everything comes from somewhere! How is matter rearranged in chemical reactions? Which principles govern energy transformations? How is genetic information conserved when we inherit traits from our parents? How does conservation apply to an expanding universe?

SENIOR SCIENCE COURSES

While our graduation program requires students to take a minimum of ONE science class at the grade 11 or 12 level, students are encouraged to take as many as they like to meet their interests and their post-secondary planning requirements.

LIFE SCIENCES 11

Life Sciences 11 concentrates on unity and diversity, form and function of organisms, the theory of evolution, and ecological relationships. It is designed to foster a sense of wonder about the world and its organisms – single-celled creatures, plants, fungus, and animals – while encouraging a sense of responsibility to sustain it.

LIFE SCIENCES 11 HONOURS & AP BIOLOGY 12 **Students must sign up for both and complete them in a single school year.*

LIFE SCIENCES 11 HONOURS and AP BIOLOGY 12 (students must choose both) This rigorous program is designed to cover both semesters so students must enroll in both courses. The two courses cover the objectives of Life Sciences 11 and Anatomy and Physiology 12 in much greater depth and detail, as well as additional material for Advanced Placement. The content-rich Biology course is designed, in accordance with the guidelines set by the College Board, to be the equivalent of a college introductory biology course. The Units covered include Biomolecules, Cellular Structure and Function, Cellular Energetics, Cellular Communication, Genetics, Natural Selection, and Ecology are some of the topics covered. This course is open to any students who are prepared and committed to do extensive inquiry-based research and labs, as well as be prepared to work independently. Upon completion, students will receive a total of 12 credits. If a score of 3 or greater is achieved on the AP Biology Exam, the student will receive credit for a first year Introductory Biology course at the college/university level. The AP Biology exam will be written in May.

CHEMISTRY 11

Chemistry is the central discipline that connects the branches of science, since matter and its reactions affect every aspect of our world. A strong basis in chemistry is useful for all science pathways. Chemistry 11 reviews and deepens students' understanding of atoms and molecules, reactions, and chemical naming. It then introduces the mole concept as a tool for mathematical analysis of chemical reactions. Through this course students will develop practical laboratory skills along with their ability to answer questions using scientific experiments.

CHEMISTRY 11 HONOURS & AP CHEMISTRY – ** Students must sign up for both and complete them in a single school year.*

This program is designed to cover both semesters so students must request both courses. The two courses cover the objectives of Chemistry 11 and 12 as well as additional material for Advanced Placement. The AP Chemistry course is designed to be the equivalent of a college introductory chemistry course. College Board guidelines are followed in the design of the course. Many topics in Chemistry 11 and 12 are covered in more detail than in the regular course. In addition, topics such as thermodynamics and thermochemistry are studied. Upon completion, students will receive a total of 12 credits. The AP Chemistry exam will be written in May.

PHYSICS 11

Physics 11 covers four big ideas: Motion in 1D and 2D, Forces in 1D and 2D, Energy, Current Electricity and Waves with a major focus on describing how and why objects move in one-dimension and two-dimensions. This course serves as a foundation for many post-secondary courses in science, engineering, and kinesiology.

PHYSICS 11: APPLIED SCIENCE (combined with Engineering 11 – AFTER SCHOOL linear class)

Physics 11 covers four big ideas: Motion in 1D and 2D, Forces in 1D and 2D, Energy, Current Electricity and Waves with a major focus on describing how and why objects move in one-dimension and two-dimensions. This course serves as a foundation for many post-secondary courses in science, engineering, and kinesiology.

PHYSICS 11 HONOURS & AP PHYSICS I **Students must sign up for both and complete them in a single school year.*

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 is 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, and Simple Harmonic 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.

SCIENCE FOR CITIZENS 11

Science for Citizens 11 invites students to explore scientific concepts and processes that are relevant to their daily lives. It focuses on application of knowledge to real-world situations, and helps students build their skills in the areas of evidence-based decision making and scientific literacy. This course incorporates hands-on and project-based learning as often as possible.

The curriculum in Science for Citizens is flexible, allowing each class to pursue topics of interest. Possible units include human health, environmental science, forensics, household chemistry, disaster preparedness, lab skills and procedures (including workplace safety), forces and machines, engineering/design, and more.

EARTH SCIENCE 11

Earth Science 11 examines many of the characteristics, processes, distributions, and interactions among the physical components of the Earth's surface. Students explore the way the physical environment is used, misused, and altered by humans. How are Earth's materials changed as they cycle through the geosphere and are used as resources. What are the consequences of tectonic plate interactions? How does the transfer of energy through the atmosphere create weather, and how is this transfer affected by climate change? How does the distribution of water influence weather and climate? What is the origin of Earth and the solar system?

ANATOMY AND PHYSIOLOGY 12

Anatomy and Physiology 12 focuses on human biology and the compounds that comprise our bodies. It allows students to develop an appreciation for how our diverse body systems work together to maintain homeostasis. In this course, students will learn about cell structure, biochemical processes, and organ systems. In addition to this, students will study how the body may respond to illnesses and/or infections. This course encourages students to develop a stronger sense of interest in human anatomy and become more curious about biological processes.

CHEMISTRY 12

Welcome to the "why" of chemistry! More challenging, more theoretical, and more intriguing than Chemistry 11 – Chemistry 12 delves deeper into the central principles governing chemical interactions. Reaction kinetics and equilibrium are explored in the contexts of solubility, acid/base chemistry, and oxidation/reduction reactions.

PHYSICS 12

Physics 12 is developed around four big ideas: Frames of Reference in Classical and Modern Relativity Models, Rotational and Translational Equilibrium through Force and Torque Analysis, Circular Motion - Dynamics and Energy analysis extended to Celestial Bodies, Static Electricity, Fields Interaction, and Momentum Conservation. Students will build upon their knowledge and skills developed in Physics 11 with additional study on physical laws, their related theories, and the mathematical relationships.

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 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 *(*Completed after AP Physics I)*

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 ENVIRONMENTAL STUDIES 12

AP Environmental Studies 12 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 Biology 11 is recommended.

PHYSICAL AND HEALTH EDUCATION

The Physical and Health Education (PHE) curriculum aims to empower students to develop a personalized understanding of what healthy living means to them as individuals and members of society in the 21st century.

The BC Physical and Health Education curriculum contributes to students' development as educated citizens through the achievement of the following goals:

PHYSICAL & HEALTH EDUC ATION 8

This course will introduce students to a wide variety of physical activity opportunities. Our focus will be on building physical literacy, participating in health and active living activities, and learning about balance in health through engaging in mental well-being and social/community health lessons. Students will also participate in field experience throughout our local community and have guest instructors visit Alpha Secondary to further student learning of alternate environment activities. Common field experience and guest instructor experiences may include skating, yoga, bootcamp, self-defense, trail hiking, Tabata, HIIT, and contemporary dance. In addition to their engagement in daily physical activity through sport and fitness lessons, students will be introduced to health units that promote healthy eating choices, teach strategies to help students avoid unsafe situations, explore mental health, and focus on healthy relationships.

PHYSICAL & HEALTH EDUCATION 9

The course is a continuation and progression of Physical and Health Education (PHE) 8 with more attention given to healthy relationships and an extension to our nutrition unit. Students will have discussions about strategies to maintain their mental health and how engaging in physical activity, in conjunction with healthy diet and stress management benefit their mental well-being. In addition, students are provided further opportunities to participate in alternate activities with a week-long focus on self-defense through traditional Kung-Fu. Students will be introduced to the principles of training through weight room lessons. Common field experience and guest instructor experiences will continue and may include skating, yoga, bootcamp, self-defense, trail hiking, Tabata, Jiujitsu, HIIT, and contemporary dance. This course will continue to build on fundamental movement skills completed in the physical literacy section of PHE and further enhance health and active living through fitness-based activities and self-reflection.

PHYSICAL & HEALTH EDUCATION 10

The Physical and Health Education (PHE) 10 course builds upon Physical and Health Education (PHE) 9, enabling students to explore alternate activities, yet still developing their physical literacy through the engagement in sport and fitness-based activities. PHE 10 continues its extension of health components and puts an emphasis on healthy relationships. In addition, students will have discussions about making positive healthy living choices through active health units. In this course, students will be given the opportunity to explore additional physical

activities available in their neighbourhood such as such golf and have the chance to become certified in a CPR/First Aid certification course lead by Burnaby Firefighters. Common field experience and guest instructor experiences will continue and may include skating, yoga, bootcamp, self-defense, trail hiking, Tabata, HIIT, hip hop dance, and contemporary dance. Students will build on their prior experience in the weight room and use the principles of training to make a weight training routine that fits their fitness goals.

PHE 10: HEALTH AND LIFESTYLE

The Physical and Health Education (PHE) 10: Health and Lifestyle course is an option for students who are looking for a PHE 10 class that is **not sport driven**. This course focuses on the healthy and active living and mental well-being aspects of PHE 10. This course does not have a gym assigned to it; it will operate from the dance room and weight room. Students will participate in the same field trips and guest experiences as PHE 10, however, this program is focused on personal fitness and wellness. Foci will include yoga, Pilates, body weight exercises, weight training, dance, hiking, and meditation. Like regular PHE 10, students will participate in golf and become certified CPR/First Aid. Common field experience and guest instructor experiences will continue and may include skating, bootcamp, Tabata, HIIT, and hip-hop dance. PHE 10: Health and Lifestyle continues its extension of health components such as healthy relationships and positive healthy living choices through active health units.

ACTIVE LIVING 11/12

Active Living 11/12 progresses from the Physical and Health Education (PHE) 10 program and offers students the chance to participate in a wider variety of sporting and recreational activities. The senior PHE program combines aspects of the junior program with an increasing focus on lifelong recreational pursuits. In Active Living 11/12, the main foci are health and well-being, safely and actively participating in PHE lessons, and leadership. This course is a good choice for those who enjoy putting in a high level of participation in individual and team sports, recreational and/or competitive activities, and fitness activities. Field trips in this course may be extended to include bubble soccer, bowling, snowshoeing, kayaking/paddle boarding, boxing, laser tagging, and indoor/beach archery. Common field experience and guest instructor experiences will continue and may include skating, yoga, bootcamp, self-defense, trail hiking, Tabata, Jiujitsu, cardio kickboxing, and HIIT. Students are provided with leadership opportunities throughout this course such as planning and running an activity, visiting a junior PHE class to lead activities or, with approval, visit a local elementary school to run organized activities/games with elementary students. This course emphasizes healthy lifestyles and teaches students to stay active after they graduate from Alpha Secondary.

FITNESS & CONDITIONING 11/12

This course progresses from the Physical and Health Education (PHE) 10 program and offers students the chance to participate in a focused weight training program for the duration of the semester in a supervised and guided environment. The focus of Fitness and Conditioning 11/12 is healthy and active living, principles of training, human anatomy and physiology, and social responsibility. This course is a good choice for students wanting to learn how to train and improve their physical fitness levels including muscular strength/endurance, flexibility, cardiovascular endurance, speed, balance, power, and agility. Most of the course will take place in the weight room with periodic classroom sessions covering several topics that include physiology of exercise, nutrition, performance supplements, goal setting (FITT principle) and the basics of individual program design. Students will learn the basics of the different types of training equipment, weight room etiquette, training techniques and safety in the weight room. This course will emphasize students to maintain the importance of personal fitness when they graduate from Alpha Secondary.

ACTIVE LIVING 11/12 HEALTH AND LIFESTYLE

The Active Living 11/12: Health and Lifestyle course is an option for students who are looking for an Active Living 11/12 class that is **not sport driven**. This course focuses on the health and well-being aspects of Active Living 11/12. This course does not have a gym assigned to it; it will operate from the dance room and weight room. Foci will include yoga, Pilates, body weight exercises, weight training, bootcamp/HIIT, dance, hiking, and meditation. Like regular Active Living 11/12, students will engage in field trips and guest experiences which may include skating, hip-hop dance, yoga studios, spinning, and swimming/aquafit. Students are provided with leadership opportunities throughout this course such as planning and running an activity, visiting a junior PHE class to lead activities or, with approval, visit a local elementary school to run organized activities/games with elementary students. This course emphasizes healthy lifestyles and teaches students to stay active after they graduate from Alpha Secondary.

CAREER EDUCATION

CAREER LIFE EDUCATION 10

Career Life Education (CLE) is a 4-credit course designed to enable students to develop the skills they need to become self-directed individuals who make thoughtful decisions, set goals, and take responsibility for pursuing their goals throughout life. Students will think critically about health issues and decision-making, develop financial literacy skills, plan the actions required to pursue future goals, and explore their post-secondary schooling and career options. This course is a graduation requirement and is the pre-requisite for graduation requirement courses of Career Life Connections (Capstone Project).

CAREER LIFE CONNECTIONS 12A (formerly CLC 11) *(2 credits)*

CLC12A is a course that is required for graduation and is delivered online through Office365 Teams. It is designed to assist students in becoming self-directed individuals who are capable of goal setting and making appropriate decisions based on the changing world in which they live. Students will also investigate and learn strategies for maintaining wellbeing and explore career life opportunities including mentorship, experiential learning, service learning, and volunteerism. To successfully complete the course students must complete all assignments and attend the Grade 12 students' capstone presentation.

CAREER LIFE CONNECTIONS 12B -CAPSTONE *(2 credits)*

CLC12B is completed through students doing a year-long Capstone Project. A capstone is a culminating project that encourages students to explore their passions and specific SMART goals for the future. Students will design, assemble, reflect, and celebrate a capstone. Ideally, the capstone project will be meaningful, relevant, and useful in the transition beyond school. Students will complete a proposal, check-in, and presentation to an audience to demonstrate personal learning and achievement. In addition to the Capstone Project, students are required to complete a resume, proof of Work Safe, 30 hours of work or volunteer experience. ***Special Note:*** Once the student has completed both CLC12A **AND** CLC12B, they will receive the total 4 credits needed to meet the graduation requirements.

CAREER PREPARATION 11

Grade 11 students interested in taking the elective course WORK EXPERIENCE 12A in Grade 12 must select a CAREER PREPARATION (CP) focus are for Grade 11, i.e., "CP - Business & Applied Business" or "CP - Science and Applied Science." Students can begin work experience in the summer of Grade 10 to complete it by their grade 12 year.

WORK EXPERIENCE 12A - 80 HOURS (4 credits)

WORK EXPERIENCE provides students with the opportunity to explore career options through hands-on work experience in various environments. It is a four-credit elective course and students are able to choose a specific area they wish to explore. Students can complete the 80-hours over school breaks as well as during the school year.

YOUTH TRAIN IN TRADES

Burnaby School District's Industry Training programs provide Grade 11 and 12 students with the opportunity to develop entry level skills, theory, and industry standard training. While earning graduation credits, students are working toward level 1 technical training certification. In all the program options, students receive in-class training and work experience. Students can then choose to pursue work in the industry or a post-secondary education in their chosen career.

Program	Location	Credits
Auto Collision and Refinishing Tech	Vancouver Community College	32
Auto Service Tech	Cariboo Hill	20
Baker (Pastry Arts)	Vancouver Community College	24
Carpenter (Construction)	Cariboo Hill	20
Construction Electrician	Burnaby Mountain & Byrne Creek	20
Hairstylist (2 semesters)	Alpha	36
Metal Fabricator	BCIT	24
Painter and Decorator	Finishing Trades Institute	4
Plumber	Piping Industry College of BC	8
Professional Cook	Burnaby Central	20
Welder	Piping Industry College of BC	8

INDUSTRY CERTIFICATION PROGRAMS

Burnaby offers 6 programs that provide students the opportunity to earn graduation credits, post-secondary credits and industry certification. Some of these programs include 120 hours of work experience.

Program	Location	Credits
Cisco Networking Academy	Burnaby South	20
Early Childhood Education Assistant	Burnaby North	16
Fitness Instructor	Burnaby South	20
Microsoft Office Specialist Certification	Cariboo Hill	1 per course
Palo Alto Cyber Security Academy	Cariboo Hill	4
Tourism and Event Management	Burnaby Mountain	16

INDUSTRY CONNECT PROGRAMS

Burnaby offers 7 unique Industry Connect programs that prepare students for post-secondary programs and entry level work. Students learn hands on skills and develop a portfolio of skills that are entry level and industry-related. Each program includes 120 hours of work experience.

Program	Location	Credits

DigiPen Game Development Academy	Cariboo Hill	2 per course
Film & Broadcast	Burnaby North	16
Graphics/Media Arts	Burnaby North	16
Health Sciences	Moscrop	16
Music Production and Technology	Burnaby North	16
Robotics (Mechatronics)	Alpha	16

YOUTH WORK IN TRADES

The Youth Work in Trades Programs allow students to complete up to 4 High School courses (16 graduation credits) while working as an Apprentice. The program is open to students who have participated in a Youth Train in Trades program, or students who are working in a trade alongside a Red Seal certified Tradesperson (this can be an employer, family friend or even relative).

LANGUAGES

FRENCH LANGUAGE

The Core French curriculum provides students an opportunity to engage in learning experiences through which they can become proficient users of French, gain new perspectives, and engage with Francophone communities. All levels of French will incorporate the four essential skills of listening, speaking, reading, and writing at steadily increasing levels of complexity.

Some of the goals of this area of learning are that students will:

- communicate with purpose and confidence in French
- appreciate the interconnectedness of language and culture
- understand the educational, travel, and career opportunities that learning an additional language offers

FRENCH 8

This course reviews basic vocabulary and grammar structures as a basis for communication in situations drawn from real-life. Students are taught to use language learning strategies to help them understand spoken and written French. Language is taught within the context of age-appropriate themes, with a large emphasis on listening and speaking. Students will engage in comprehending and narrating simple stories, exchanging ideas on topics of interest, exploring aspects of Francophone culture while making connections between Indigenous communities and the French language. Students will begin to appreciate the interconnectedness of language and culture, and understand the educational, travel, and career opportunities that learning an additional language offers.

FRENCH 9

This course builds upon the knowledge, skills and language learning strategies acquired in French 8. There is an increased emphasis on listening, speaking, reading, and writing. In this course, students will use French to participate in short conversations, ask for and share information about activities and interests. Students will engage in the discovery of Francophone creative works. They will explore the connection between the French

language and Indigenous communities. Students will discover aspects of Francophone culture around the world as well as make connections with their own personal and social identity. Students will develop an appreciation for the interconnectedness of language and culture, and understand the educational, travel, and career opportunities that learning an additional language offers.

FRENCH 10

This course reviews and builds upon the French 9 program. By the end of this course, students will express themselves more fluently both orally and in writing. Students will narrate stories and engage in conversations about familiar topics. They will explore the connection between the French language and Indigenous communities. Students will also explore Francophone culture around the world. Students will have a greater appreciation of the interconnectedness of language and culture, and understand the educational, travel, and career opportunities that learning an additional language offers.

INTRODUCTORY FRENCH 11

Introductory French 11 is an intensive introductory course, covering two years in one (French 9 and French 10). The focus of this course is communication through listening, speaking, reading and writing activities, in order to develop the necessary language structures and vocabulary. The cultures, customs and traditions of French speaking countries will also be explored enriching the authentic language-learning experience.

FRENCH 11

This course reviews and builds upon the French 10 program, with an emphasis on written communication and reading comprehension. Students will interact and engage with a wide variety of texts. They will participate in meaningful conversations and express themselves with greater fluency. They will have awareness towards recognizing that language and culture have been influenced by the interactions of First Peoples and Francophone communities in Canada. Students will continue to explore Francophone culture around the world.

FRENCH 12

This course will provide increased opportunity to develop all four skills in listening, speaking, reading and writing. Students will explore and interpret a wide variety of texts. Students will be able to engage in meaningful conversations on a variety of topics of interest, both orally and in writing to express themselves effectively, with increasing fluency and accuracy. Students will narrate stories, both orally and in writing. Instruction will often be in French, and students will be encouraged to use French as the routine language of communication. Students will examine Francophone culture around the world and recognize that language and culture have been influenced by the interactions of First Peoples and Francophone communities in Canada.

SPANISH LANGUAGE

SPANISH 9

Spanish 9 is an introductory language course. This course allows students to engage in learning experiences through which they can become proficient users of Spanish, gain new perspectives, and engage with Spanish-speaking communities. All Spanish courses use an integrated approach to language learning and focus on the four essential skills of reading, writing, listening, speaking and interacting. Opportunities are provided for students to participate in short conversations, ask for and share information about activities and interests, listen to authentic audio scripts, watch films, learn dance and music, read various texts and express themselves in the written language.

Students in Spanish 9 will explore:

- Spanish-speaking areas in the world
- Spanish-speaking populations and culture
- School life in Spanish-speaking regions
- Spanish language songs and films
- Formal and informal forms of address in different social situations

SPANISH 10

Spanish 10 builds on the basis language skills acquired in Spanish 9. In this course students explore a variety of Spanish-language texts and continue to expand their understanding of Hispanic cultures. All Spanish courses focus on the four essential skills of listening, speaking, reading and writing. Some of the big ideas include:

- Cultural expression can take many different forms.
- Expressing ourselves and engaging in conversation in a new language require courage, risk-taking and perseverance.
- Listening and viewing with intent supports our acquisition and understanding of a new language.

INTRODUCTORY SPANISH 11

Introductory Spanish 11 is an intensive introductory course, covering two years in one (Spanish 9 and Spanish 10). The focus of this course is communication through listening, speaking, reading, and writing activities, in order to develop the necessary language structures and vocabulary. The cultures, customs and traditions of Spanish speaking countries will also be explored enriching the authentic language-learning experience.

SPANISH 11/12

SPANISH 11/12 Spanish 11 and 12 are higher-level courses concentrating on developing students' language proficiency through listening, speaking, reading and writing. By the end of these courses, students will be able to use Spanish to complete a variety of written and performance-based tasks. Grammar and vocabulary are taught more extensively, in order to clarify and enhance communication skills. Students will examine Spanish-speaking culture around the world.

MANDARIN CHINESE LANGUAGE

The Mandarin Chinese courses offer students an opportunity to learn the Chinese language system, to strengthen their Mandarin language skills and to gain new perspectives on the Chinese Canadian history and the global Chinese community.

MANDARIN 9

This is the first of a four-level curriculum, and it is designed for students beginning to learn Mandarin Chinese as an additional language. This course focuses on ***hanyu pinyin*** *(*the Mandarin phonetic system), basic structure of Chinese characters, vocabulary based on both the textbook and the new BC curriculum, basic sentence structures, etc.

MANDARIN 10

This is the second of a four-level curriculum, and it is designed for students who are continuing to learn Mandarin Chinese as an additional language. Students will strengthen and expand the communication skills they have acquired in Mandarin 9. The course focuses on developing students' abilities in speaking, listening comprehension, reading comprehension and writing.

INTRODUCTORY MANDARIN 11

Introduction to Mandarin 11 will cover both Mandarin 9 and 10 content and leads to Mandarin 11.

MANDARIN 11

This is the third of a four-level curriculum for student learning Mandarin Chinese as an additional language. Expanding on the basic skills acquired in Mandarin 10 or Intro 11, students will practice on dialogues, writing notes, letters, and small paragraphs. Students will be introduced to about 560 Chinese characters and expressions.

MANDARIN 12

This is the fourth of a four-level curriculum for students who have prerequisite of Mandarin 11 or equivalent. Students in this course are learning Mandarin Chinese as an additional language and will continue learning Chinese expressions, idioms, sentences and practicing computer input with pinyin. Students will work on more advanced reading and writing exercises that include dialogues, notes, letters, and paragraphs.

FRENCH IMMERSION

École Alpha is one of three schools in Burnaby that offer Secondary French Immersion. This program is a continuation of either early immersion or late immersion (grades 6 and 7).

Teachers in this program collaborate to make the curriculum of each subject exciting and challenging for students. Classroom activities promote cultural knowledge and understanding, communication, and the use of authentic materials. Students are also offered a variety of extracurricular activities enabling them to develop leadership skills and enhance learning, such as contests, field trips, participation in clubs, school-wide events and the many student exchange programs.

In grade 8, 9 and 10, students take 50 % of their courses (4 courses) in French. They receive instruction in the French language in four of the following courses:

- Français langue (French Language)

- Sciences humaines (Social Studies)
- Mathématiques (Mathematics)
- Sciences naturelles (Science)

In grades 11 and 12, students must take one Français langue (French Language) course each year for a total of two courses, and one Sciences humaines (Socials studies) class. Students are welcome to take additional courses in French during grade 11 or 12 for extra credits, in Français langue or Sciences humaines. Additionally, in May of their grade 12 year, the students have the option of completing the AP French Language and Culture exam on request.

GRADE 8 to 10 COURSES

FRANÇAIS LANGUE SECONDE 8

In Français langue 8, Students will develop language skills while reading, writing, listening, and speaking French. French is the only accepted language in class, and it is crucial that students express themselves in French as often as possible while in the classroom. Learning activities include discussion, role-play, presentations, singing, film studies and reading various literary genres.

SCIENCES HUMAINES 8

Students will also explore the rise and fall of several major civilizations while developing their understanding of the diverse world of cultures that surround us. Students develop their skills at assessing documents (writing, drawings and recordings) for bias in order to understand history as more than a collection of fact.

MATHEMATIQUES 8

This is the first course in secondary school mathematics and builds upon the skills developed in previous grades. The units studied include number concepts and operations, patterns and relations, shape and space, variables and equations, statistics and probability and financial literacy. This course aims to provide students with the opportunity to develop the knowledge, skills, and attitudes necessary to be numerate. Mathématiques 8 focuses on curricular competencies that include Reasoning and Analyzing, Understanding and Solving, Communicating and Representing, and Connecting and Reflecting. Enrichment opportunities will be provided through the preparation and writing of math contests.

SCIENCES NATURELLES 8

In Sciences naturelles 8, students are introduced to laboratory skills and safety and begin to apply the scientific method to their explorations. The big ideas explored in Science 8 include: Life processes are performed at the cellular level; the behaviour of matter can be explained by the kinetic molecular theory and the atomic theory; energy can be transferred as both a particle and a wave; the theory of plate tectonics is the unifying theory that explains Earth's geological processes.

FRANÇAIS LANGUE SECONDE 9

Students will continue to build language skills with a focus on precision in their written and verbal communication. As their grammar skills advance, students will be able to use verb tenses and complex grammar elements to explain themselves with greater clarity and efficiency. Students will put these skills to use in class debates, discussions, presentations, and speeches, as well as creative writing. Various essay-writing techniques will be explored, and students will focus on synthesizing (comparing and contrasting) ideas found in various works of

literature, as well as songs and films. Readings will include tales, a novel, and an assortment of poetry from around the world.

SCIENCES HUMAINES 9

Sciences humaines 9 takes students out of the Renaissance and throws them into a world of turbulent ideas; the result is a series of revolutions that changed the Western World forever. Students will examine these and weigh the pros and cons of radical change and its effect on society. In doing so, students will compare and contrast the different elements that led to these changes and discuss whether or not revolution is necessary. As they explore these events, students will also explore the geography, of the regions affected, as well as the movement of people and the ways colonization has affected First Nations people. The focus will be mainly on the Canadian perspective and how Canada has become a nation of diversity. Throughout the course, students will discuss the weekly news; current events not only help us imagine our future but also prove that the history we study often repeats itself.

MATHÉMATIQUES 9

This course is designed to extend on topics from Mathematics 8. Topics include operations with rational numbers, exponents, polynomials and algebra, linear relations, shape and space, statistics, and financial literacy. At the end of this course, students will be prepared for Foundations and Pre-Calculus 10 OR Workplace 10. Enrichment opportunities will be provided through the preparation and writing of math contests.

SCIENCES NATURELLES 9

In Sciences naturelles 9, students continue to build on their laboratory skills and to explore the impacts of science and technology on individuals, society, and the environment. The big ideas covered in Science 9 include: Cells are derived from cells; The electron arrangement of atoms impacts their chemical nature; Electric current is the flow of electric charge; The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them.

FRANÇAIS LANGUE SECONDE 10

This is the first of two pre-AP years of French language and literature study. Students who wish in their Grade 12 year (Français langue 12) to challenge the AP French exam will be able to do so. In order to prepare students, we will continue to build grammar skills and vocabulary, and put these to use in written work, oral presentations and debates. Students will read a variety of short fiction, poetry, novels and plays, including at least one period piece. Students will learn to synthesize various sources of information, both written and audio, and offer opinions that integrate all sources of information.

SCIENCES HUMAINES 10

This course follows the Grade 10 Socials curriculum, examining how Canada formed and grew as a nation in the 20th century. Students will examine the participation of Canada in the two World Wars, they will study different communities who helped build our country, including First Nations, various immigrant groups, and their conflicts and struggles as Canada became a cultural mosaic. Students will also explore the Canadian political system, including elections, ideologies, role of provincial and federal government and the importance of active and responsible citizenship duties. Sciences humaines 10 will be followed by Sciences humaines 11.

MATHÉMATIQUES: FONDEMENTS ET PRÉ-CALCUL 10

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in the fields of Science, Engineering, Business, Language Arts, Fine Arts and

other courses offered at post-secondary degree and diploma granting institutions. Topics include applying trigonometric ratios to right triangles, prime factorization, operations with powers, functions and relations, systems of linear equations, arithmetic sequences, operations with polynomial expressions, and financial literacy. Students who have successfully completed the course may register for Foundations of Mathematics 11, Pre-Calculus 11, or Workplace 11.

SCIENCES NATURELLES 10

Sciences naturelles 10 students continue to delve deeper into transferring and applying learning to new situations, and in evaluating investigation methods, claims and sources of information. The big ideas explored in Science 10 include: DNA is the basis for the diversity of living things; energy change is required as atoms rearrange in chemical processes; energy is conserved and its transformation can affect living things and the environment; the formation of the universe can be explained by the big bang theory.

ÉDUCATION À LA VIE PROFESSIONELLE 10

The Career Learning Education course gives students the opportunity to follow an enriching path that will permit them to attain their goals. It is the French Immersion version of CLE 10 and must be completed in order to meet the Ministry's provincial graduation requirements. This program encourages students to explore their own identities, their goals and their well-being in different learning contexts. Students will recognize the value of learning by experience and the connections with their communities. They will reflect upon their own development in their lives and careers. Students will predict and plan their continuing progression in developing their skills in order to support their own learning. The course is structured in a way that facilitates the integration of multiple learning domains. In addition, the students will have an opportunity to continue to develop and use their French language skills in meaningful real-life situations as well as explore ways in which their French skills can be used to further their post-secondary education and career.

GRADE 11 & 12 COURSES

For the French Immersion Dual Dogwood, two French Immersion courses are required in Grade 11 and one French Immersion course is required in Grade 12.

ÉTUDES AUTOCHTONES CONTEMPORAINES 12

This course focuses on the diversity, depth, and integrity of Indigenous cultures worldwide. Students will learn how Indigenous people's identities, worldviews, and languages are renewed, sustained, and transformed through their connection to the land. We will examine the processes of colonization and their impacts on our world today. Students will consider multiple perspectives regarding community development and make connections to the present realities of Indigenous people and the movement toward reconciliation, decolonization, and self-determination. **This course meets the Indigenous-focused AND the French coursework requirement.**

LANGUE ET CULTURE DE LA FRANCOPHONIE 11

Language and Culture of the French-Speaking World 11 offer the students the opportunity to reflect on how language and culture shape their personal perceptions, values, and self-identification as bilingual learners. Students become aware of the realities of their own culture, the French-speaking world and strengthen their

Canadian identity. Through a variety of literary texts and works from different eras, cultures, styles and genre, students will develop an understanding and an appreciation of the French-speaking world. They will continue developing their ability to analyze, interpret, and reflect.

FRANÇAIS LANGUE SECONDE 12

French Immersion 12 is required to receive a bilingual diploma. Students will complete Français langue 12 and write the mandatory French literacy assessment at the end of their Français langue 12 semester. All students will also have the option of writing the AP French Language and Culture exam in May for an Advanced Placement credit. Students explore different types and genres of texts, from various sources, that reflect la Francophonie and the Indigenous perspectives. The course encourages students to use critical and creative thinking to analyze various communication situations and refine their communication skills in diverse contexts in order to achieve their personal and career objectives. The graduation program requires students to take the *Évaluation de littératie de la 12e année – Français langue seconde – immersion*. There are two components to this exam, written and oral.

ADDITIONAL ELECTIVES – FOR ADDITIONAL GRADUATION CREDITS

ÉTUDES DU CINÉMA ET DE LA LITTÉRATURE FRANCOPHONE 12

French-Language Film and Literary Studies 12 is designed to encourage students to discover, explore, analyze, and interpret cinematographic and literary works of the French-speaking world. By studying a variety of texts, students will acquire knowledge of Francophone culture, which will contribute to the development of their identity. A variety of film and literary genres will be explored to allow students to develop their creative thinking skills as well as their writing styles.

APPLIED DESIGN, SKILLS & TECHNOLOGIES (ADST)

ADST 8: TECHNOLOGY EDUCATION/HOME ECONOMICS COMBINATION COURSE

ADST 8 explore various classes in Applied Design, Skills and Technology. Students will spend half a semester in Home Economics, and half a semester in Technology Education. In ADST, students will grow in their ability to use design thinking to gain an understanding of how to apply their skills to problem finding and solving, using appropriate technologies. This course involves students in the design and fabrication of objects using a variety of materials, methods, technologies, and tools in order to develop their ability to shape and change the physical world to meet human needs. Technology Education includes areas such as woodwork, electronics, drafting, power mechanics, and robotics. In Home Economics, students will create several projects in the Textiles lab including an apron and prepare 5 recipes in the Food's lab.

ADST 8: DIGITAL LITERACY/MEDIA ARTS

An introductory course where students will have the opportunity to develop skills and produce original work in layout and design, graphics and images, and presentations. Digital Literacy/Media Arts 8 will also provide students with entry-level experience in applications of Office 365: word processing, presentation, spreadsheet, and e-mail. Students will also learn and practice keyboarding using proper technique.

TECHNOLOGY EDUCATION

ADST 9: ELECTRONICS AND ROBOTICS

This course covers basic electronic concepts, including circuits, schematics, electronic test equipment and measurement. Students will construct electronic projects such as strobe lights, electronic games, toys, alarms, timers, motion detectors and amplifiers. Additional costs may be incurred for program options.

WOODWORKING 9-12

These courses develop knowledge and skills in many aspects of woodworking including design, safe tool use (both hand, power, and shop tools), joinery and finishing. Students will be introduced to materials and hardware used in woodwork. Students will complete several small projects of increasing complexity and will have opportunities to use their own creativity, appropriate to their skill level. Workplace health and safety is emphasized throughout the course. Additional costs may be incurred if students chose to purchase specialty components.

FURNITURE & CABINETRY 12

This advanced woodworking course further develops skills with a focus on designing and building furniture. There will be some smaller projects to address specific skills before students move to their final project of constructing a piece of furniture. Skills and knowledge will focus on those associated with the Cabinet maker trade, including materials and material science, hardware, project planning and budgeting. Workplace health and safety is emphasized throughout the course. Additional costs may be incurred if students chose to purchase specialty components.

ELECTRONICS AND ROBOTICS 10

This course covers basic electronic concepts in both analog and digital circuits. Students will construct a variety of project designs and will be encouraged to apply circuit design to a chosen application. An introduction to programming micro-controllers and robots using Easy 'C' and other programming languages are included. Students will also learn the standards and conventions of electronic engineering and learn acceptable attitudes and ethics required in industry.

ELECTRONICS 11

The first component of this course will focus on the design and function of analog circuits and their application in projects such as amplifiers, power supplies, and frequency filters. Projects will be designed and built using this technology.

ROBOTICS 11

This course sees an expansion of topics from Robotics 10, with the use of sensory feedback systems considerably more incorporated into their robot designs and computer programming. Students also have the opportunity to learn a new, more versatile programming language, RobotC. They also receive a basic introduction to computer aided drafting/design and prototyping software. Students have various opportunities to work individually and in groups. The VEX annual competition will drive the design component of the course, with a heavy focus on creating efficient, autonomous robots.

ENGINEERING 11: APPLIED SCIENCE (Y-BLOCK)

Engineering 11 *(combined with Physics 11, after-school, linear class) provides students the opportunity to apply their Science and Math knowledge to practical projects that demand creative, critical, and problem-solving skills while manipulating various materials with machine and hand tools. The objective is to offer a course that delivers

an exhilarating and uniquely rigorous curriculum for students looking for a challenge that helps prepare them for postsecondary.

ELECTRONICS 12

The second component of Electronics will focus on a variety of digital electronic concepts, such as logic gates, memory, and counters. Projects will be designed and built using this technology. Employment opportunities in this field will be presented, as well as post-secondary options.

ROBOTICS 12

This course has students honing their programming skills in the language RobotC and EasyC, while incorporating more advanced programming techniques and structures into their programs. They also learn to use the prototyping programs such as SketchUP, Inventor and QCAD as a design tool, to construct 3D virtual models of their designs before physical construction. Students have various opportunities to work individually and in groups. The annual VEX competition will provide a starting point for student designs. Students will develop an independent directed study style research and development project which will be documented in a design portfolio.

SKILLS EXPLORATIONS 10 - 12: CARPENTRY, ELECTRICAL, PLUMBING

Students will construct small houses, then add the electrical and plumbing systems, just as would be found in any home in British Columbia. Topics covered will include: an introduction to various wood products, wood frame construction methods, basic electrical theory, how to properly add the plumbing and electrical systems to a wood framed building, and the basics of the building code relating to construction, electrical, and plumbing. Students will also learn about safe work practices relating to construction sites in general, the carpentry, electrical and plumbing trades, and the use of various hand and power tools. This is a great course for any student who would like to learn about work in the building trades, is considering a career in engineering or architecture, or simply would like to know how the houses in our neighborhood were put together.

HOME ECONOMICS

ADST 9: FOOD STUDIES

Students will learn a variety of cooking methods and techniques to prepare tasty and nutritious meals. The major units of study include: baking, breakfast, lunch, and dinner. Students will prepare 30 different recipes and explore topics such as safety and sanitation, nutrition, kitchen basics, the role of ingredients, and how food production impacts society.

ADST 9: TEXTILES

Students will construct simple garments, crafts, accessories, and household items. Possible projects include: pajamas, simple skirts/pants, hoodies, bags and craft items such as knitting, macramé and crocheting. Students will explore and study career opportunities in the Textile and Fashion Industry, cultural influences on fashion and textile choice, basic sewing terminology, and fabric and fibre basics including production, characteristics and care. A small selection of fabrics is available for use in lab; however, students are encouraged to purchase their own materials based on personal preference.

SKILLS EXPLORATION 10: INTERNATIONAL FOODS 10

This hands-on course will offer three modules – Cooking, Baking, and Tourism. The Cooking module will include knife skills, soup, thickening agents, emulsification, vegetables, dressings, meat, poultry, and plating/presentation. The Baking module will include cookies, cupcakes, scones, chocolate, flat breads, and decoration. The Tourism module will add an international flair to the course where students can explore tourism in a variety of countries such as Italy, China, Japan, Mexico, India, Greece, and Thailand. Students will learn about global issues surrounding food production and prepare recipes from the countries they study. This course is an excellent option for students interested in learning more about careers in cooking, baking, or tourism, or for students who want to improve their food preparation skills and world knowledge.

TEXTILES 10: TEXTILE DESIGN AND CRAFTING

Students will review basic techniques of garment construction and plan projects to include these new techniques. Possible projects include the use of both knits and woven fabrics. Construction techniques include: fly-front zipper pants, unlined jacket, lined skirt, shirts with a collar stand and cuff. Crafting projects will include up-cycling and recycling. Students will also explore and study fashion, design and marketing. The focus will be learning the Canadian Fashion Market and discovering what influences our designers. Discussions will include the environmental impact of the Textiles industry. A small selection of fabrics is available for use in lab; however, students are encouraged to purchase their own materials based on personal preference.

FOOD STUDIES 11/12: YEAR B (SEPTEMBER 2025 - FOOD SAFE LEVEL I BC CERTIFICATION YEAR)

Students will further enhance their knowledge, skills, talents, and techniques in Culinary Arts by preparing healthy, nutritious and appetizing items. Students will also be presented with Food Safe Level 1 Instruction, whereby paying the Food Safe fee of $32.00 they will be properly instructed to prepare for the exam. Food Safe requires all students to pass at 70% or better, in order to be certified with Food Safe Level 1. Students will be meeting the requirement of 8 hours of instruction. For the majority of the course, food labs will delve into sweet and savory yeast breads, soups, poultry & gelatin, vegetables and salads, complete and incomplete proteins, as well as desserts. Course content will also focus on food marketing practices, environmental and health issues related to the production and consumption of food. Come and bring an open mind and an adventurous palate!

FOOD STUDIES 11/12: YEAR A (SEPTEMBER 2026 – SUPERHOST: FOUNDATIONS OF SERVICE QUALITY CERTIFICATION YEAR)

Students will further enhance their knowledge, skills, talents, and techniques in Culinary Arts by preparing healthy, nutritious, and appetizing items. Students will also be presented with SuperHost: Foundations of Service Quality Instruction, whereby paying the SuperHost fee of $40.00, they will be properly instructed to prepare for the exam. SuperHost requires all students to pass at 70% or better, in order to be certified. Students will be meeting the requirement of 6 hours of instruction. For the majority of the course, preservation techniques such as canning, freezing, dehydration, fermenting, and salting will be covered; and labs will include flour mixtures, vegetarian options, salads, grains, pressure cooking, meats & alternatives, beverages, and desserts. Course content will also focus on a research project focusing on food promotion and marketing strategies. Come and bring an open mind and an adventurous palate!

BAKING 11/SPECIALIZED STUDIES IN FOODS 12 - BAKING 12: YEAR A (SEPTEMBER 2025)

A practical, hands-on course that enables a student to learn both beginning and advanced techniques in the area of Baking and Pastry. Emphasis on the course will include time management, food safety and pathogens, recipe conversions, creative expression, presentation, and cost efficiencies. Students will delve into quick breads,

cookies, cakes and cake decorating, yeast breads, pastry and more! All labs and recipes are different from Year B. Sign up and enjoy a term of both sweet and savory baking!

BAKING 11/SPECIALIZED STUDIES IN FOODS 12 - BAKING 12: YEAR B (SEPTEMBER 2026)

A practical, hands-on course that enables a student to learn both beginning and advanced techniques in Baking and Pastry. Emphasis on the course will include time management, food safety and pathogens, recipe conversions, creative expression, presentation, and cost efficiencies. We will explore healthy substitutions in baking and challenge students to push their baking skills to the next level! Students will delve into quick breads, yeast Breads, cupcake decorating, making your cookies taste better, custards, mousses, cookie decorating and more! All labs and recipes are different from Year A. Sign up and enjoy a term of both sweet and savory baking!

TEXTILES 11/ 12

Students who have completed a Textile Studies course can further develop their skills using more difficult fabrics and more complex patterns. Those students who have sewn since grade 8 will learn basic techniques necessary for the construction of three garments, (i.e., dress, blouse, shirt, pajamas, fitted pants, shorts, skirt, vest, unlined jacket, housecoat.) or other textile products using sewing, embroidery, knitting, or weaving. Projects may be chosen according to individual needs and ability. Patterns and fabric are selected in keeping with fashion trends and personal taste. These courses are offered as levels, so you can still take a Textiles 12 course if you have only completed Textiles 8.

INTERPERSONAL AND FAMILY RELATIONSHIPS 11

This course explores a variety of relationship: friendship, parent, work relationship and committed relationships. We will use psychology to help examine how these relationships have evolved or end. This course also provides an overview of effective communication, wellness, and safety in interpersonal relationships.

CHILD DEVELOPMENT & CAREGIVING 12

This course explores past and present trends in both psychology and science in child development from pregnancy to age 12. This course will also cover how to care for babies and children at each stage: nutritional needs and brain development. This is an excellent course for those considering careers involving children, including healthcare, teaching, childcare, and recreation, or for those who simply enjoy being around children or who plan to eventually become a parent in the future.

BUSINESS EDUCATION

ACCOUNTING 11

This course is focused to provide knowledge that everyone needs in life with money. Do you want to run or work in a small business? This course is highly recommended for students who want to become a professional (accountant, doctor, lawyer, businessperson) and learn what is required to look after your own business. Learn the fundamentals of accounting and the techniques of solving financial problems.

ACCOUNTING 12

Accounting 12 examines what it takes to be in a management accounting position. Students will learn through research and analysis to understand and build upon the accounting cycle. The course focuses on strategic managerial decision-making skills and helps to develop interpersonal and presentation skills.

Accounting 12 explores topics including: payroll, inventory, specialized journals & ledgers, internal controls, investments, and the Cash Flow Statement, all used in managerial accounting.

ADST 9: ENTREPRENEURSHIP AND MARKETING

Are you the next Steve Jobs? In this course students will have the opportunity to develop and display their entrepreneurial and marketing skills by participating in a real business venture. In the creation of this venture students will:

- Evaluate the risks and benefits of entrepreneurship
- Develop marketing strategies
- Explore evolving consumer needs and wants
- Recognize the role of online technologies
- Reflect on financial performance and overall business success
- Work effectively both as individuals and as a group

ENTREPRENEURSHIP AND MARKETING 10

In this course students will have the opportunity to realize and develop their entrepreneurial skills, by creating their own product/idea. Students will:

- Learn ethical marketing concepts.
- Analyze marketing strategies and techniques including advertising, social media influencing and branding.
- Experience what it's like to be an entrepreneur, whether they are inventing an idea/product from scratch or adding value to an existing idea/product.
- Explore barriers that various groups of entrepreneur's face and the factors that can contribute to their success.

MARKETING & PROMOTION 11

In this course students will have the opportunity to create and participate in a real business. Potential business ideas include: food items, Alpha clothing and merchandise, promotion of school events/performances, and more! This is a fun, collaborative, hands-on course that will allow students to see what marketing is all about. In this course students will have the opportunity to manage the school store, LEGENDS. Course topics include:

- Create marketing and promotion strategies to persuade consumers to purchase
- Learn how to build and maintain both an online and physical store
- Target market and segmentation
- Evaluate existing company marketing strategies/campaigns
- Design different forms of advertising, including print ads & commercials
- Understand the risks associated with marketing a product: environmental, financial, and emotional

ENTREPRENEURSHIP 12

This course is designed to help students grow their business ideas into a workable business plan and to help develop some lifelong business skills. The course teaches students to plan, research, develop and implement venture plans that link technical and managerial resources and innovation. Ethical and sustainable consideration will be included in the entrepreneurial processes.

ECONOMICS 12

Economics 12 provides students with an opportunity to explore how the economy is structured, the value of money, economics in everyday life. Students will have an opportunity to explore concepts in real time studying real world economic situations. Students will also explore career opportunities in economics.

TOURISM 11

Tourism 11 is a valuable course for students who are considering entering the tourism industry, one of the fastest growing industries worldwide. Students taking this course will be required to go on field trips to explore unique tourism opportunities. In Tourism 11 students will explore:

- The economic influence of tourism on local and international markets
- The evolution of tourism, ecotourism, and experiential tourism
- First Peoples tourism
- Online tourism strategies
- Interpersonal and public relations skills

TOURISM 12

Tourism 12 is a valuable course for students who are considering entering the tourism industry, one of the fastest growing industries worldwide. Students taking this course will be required to go on field trips to explore unique tourism opportunities. In Tourism 12 students will explore:

- Tourism and hospitality industry career explorations
- Multi sector research and tourism marketing research
- Risk management in tourism
- Hospitality and communication skills for local and international tourists

*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.

INFORMATION COMMUNICATION TECHNOLOGIES

ADST 8 : DIGITAL LITERACY/MEDIA ARTS

An introductory course where students will explore the use of technology in creating art and designing games. We will experiment with scalable vector graphics (SVG) programs to design and create logos, use a block-based coding language to develop games, and explore how encryption keeps our information secure when using the internet

and discuss the point in security weakness. Throughout, Digital Literacy/Media Arts will practice good file management habits and familiarize students with modern computer use conventions.

ADST 9: MEDIA ARTS 9

Media Arts has a *visual and graphic arts focus*, preparing students for Graphic Arts 11/12 exploring foundational ideas of layout, design, graphics, and photography (digital/traditional) and their roles in communicating stories, ideas, and information. Emphasizing ethical and legal considerations in digital media, students learn about copyright, appropriation, and ownership rights. Students will be introduced to the foundational principles of designs and image development strategies. As this is a visual arts focused course, students should be prepared to explore communication through design both via freehand drawing and using technology.

ADST 9: INFORMATION COMMUNICATION TECHNOLOGY (ICT)

This course will introduce a wide range of concepts and techniques of the digital world. We will use a project-based approach to explore the topics:

- In depth use of Word and PowerPoint
- Internet and telephony design and topology
- How computers store and utilize binary
- Designing programs to automate complex tasks

As students design and share knowledge in innovative ways, they gain perspective on the long-term implications of life in a digital, connected world and develop literacies to responsibly take ownership of such technologies to augment learning and benefit society.

COMPUTER STUDIES 10 (PROGRAMMING)

Students enrolled in this course will focus on the design process for both computer hardware and software. Through ideating and prototyping students will be able to test and share algorithmic solutions that when put together will complete a complex task. Additionally, we will explore how to use readymade applications to better present data and automate repetitive tasks.

COMPUTER PROGRAMMING 11

Computer Programming 11 will use the design cycle model to iterate and develop coding solutions to complex problems. Students will practice dividing a complex project into modular components, evaluating their effectiveness and accuracy, and incorporating those components into a final product. Prior coding experience is not necessary to be successful in this course.

COMPUTER PROGRAMMING 12

Computer Programming 12 builds on the foundations introduced in the previous grade, developing, and practicing vocabulary to critically analyze the space and time efficiency of their algorithms. This course will explore a variety of data structures evaluating their advantages and disadvantages to determine their suitability in a project. Additionally, we will evaluate the effectiveness of various classic algorithms and apply them in solutions.

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. Topics will include: 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.

VISUAL AND PERFORMING ARTS

"The arts are forms of thought every bit as potent in what they convey as mathematical and science symbols. They are ways we human beings 'talk' to each other. They are the languages of civilizations through which we express our fears, our anxieties, our curiosities, our hungers, our discoveries and our hopes. They are modes of communication that give us access to the stored wisdom of ages…"
-Charles Fowler
COMMITTED TO EXCELLENCE IN THE VISUAL ARTS

VISUAL ARTS

ARTS EDUCATION 8

Art 8 is an introductory course in which students explore a variety of materials in two-dimensional and three-dimensional image-making, develop basic drawing skills, and consider the work of selected artists. *A sketchbook is recommended.*

ARTS EDUCATION 9

This course provides opportunity for exploration of a variety of materials, processes and techniques in two-dimensions and three-dimensions, and the study of artists who have worked in these areas. Emphasis will be placed on the development of personal imagery and a basic understanding of the elements and principles of design. *A sketchbook is recommended.*

VISUAL ARTS 10/STUDIO ARTS 11/12: DRAWING & PAINTING

This course explores techniques of drawing and painting. Students will enjoy creative artistic expression using a variety of materials such as: acrylic and watercolour paint, pen and ink, charcoal, graphite, oil and chalk pastel and pencil crayons. As they are exposed to many styles of art and study the work of selected artists, they will develop a deeper understanding of the elements and principles of design. It is highly recommended that students taking AP Studio Art 12 take this course either concurrently or as a pre-requisite. *A sketchbook is recommended.*

VISUAL ARTS 10/ STUDIO ARTS 11/12: CERAMICS & SCULPTURE

This course is for students who like to work 3-dimensionally. Students create a variety of art forms using clay, wire, papier-mâché, plaster, cardboard, and recycled materials. The focus is manipulation of form and space using materials and processes while learning the elements and principles of 3D design. Historical and contemporary ceramics and sculpture will be explored.

VISUAL ARTS 10: MEDIA ARTS 10

This course exposes the foundations of graphic arts design, preparing students for Graphic Arts 11/12. The course emphasizes the development of foundational knowledge, requiring students to understand elements and

principles of design, image development strategies, media technologies, and common terminology in media arts. Students will further develop their understanding on how design plays a role in communication. Furthermore, it delves into ethical considerations, addressing moral rights, cultural appropriation, and plagiarism within the realm of media arts technology. Students will be expected to both explore design via freehand drawing and using technology.

STUDIO ARTS 10: GRAPHICS 11/12

This course actively engages students in creating two-dimensional media artworks, embracing sensory inspiration, imagination, and inquiry. The course emphasizes the development of foundational knowledge, requiring students to understand elements and principles of design, image development strategies, media technologies, and common terminology in media arts. Furthermore, it delves into ethical considerations, addressing moral rights, cultural appropriation, and plagiarism within the realm of media arts technology. Students will be expected to both explore design via freehand drawing and using technology.

PHOTOGRAPHY 10/11/12

This course is designed for students who wish to learn about photography, and it includes both technical and creative components. Students will study historical developments and apply the elements and principles of design in photographic production and critiques. Students will take photographs using cell phones and digital DSLR cameras as well as discover the uses of a variety of lenses. There will be opportunities to enhance and alter images using Adobe Photoshop and Lightroom. Students who take this course for more than one year will deepen their understanding of photography, and they will develop a portfolio of personal work and explore career options.

YEARBOOK 11/12 – LUNCH TIME CLASS

If you are a committed student who is looking for a way to get involved in the school community, this course is for you! This is a linear course scheduled at lunch time on Mondays, Wednesdays, and Thursdays. Students will be working in a team throughout the year. Photography assignments will require students to stay after school and travel to take sports team photos. As well, some evenings will be required to photograph events such as the winter concerts. Each student must be prepared to dedicate more than lunch hour's class time to the production of this historical document. In return, this course offers students valuable work skills and training in photography, teamwork, time management and leadership. Students will learn about photojournalism, photography, photo editing and creating layouts. Highly motivated and organized students will take on various leadership roles including Co-Editor and Section Editors. Because of the demands of meeting publishing deadlines, both attendance and punctuality are a must.

DRAMA

DRAMA 8

Drama 8 is a beginner's dramatic course that allows a new high school student to hang up their academic hat at the door and melt into a world of imagination and exploration while learning the fundamentals of performance, theatre history, respect, and responsibility. In this course, students will learn valuable techniques in public speaking and delivery, how to work well in a cooperative learning environment without desks and chairs, and how to become self-reliant and secure. This elective will provide students who have a theatrical edge the opportunity to begin on the path to their dreams, as well as a first chance at expressing oneself for the students who are approaching a dramatic course for the first time.

DRAMA 9

Welcome to Drama 9! For some this course is a reintroduction to the Dramatic Arts, and for others, it is a new dramatic experience, as they are entering the elective for the first time. This course is an experience like no other grade nine course, where students will be able to illustrate their creativity in one of the truest forms: performance! It is anticipated that the students will find comfort in this classroom with their peers, as they learn to perform and harness their dramatic skills.

DRAMA 10

Drama is a discipline that originates in the impulse to depict experiences, communicate an understanding of these experiences, and give them form and meaning. Drama 10 takes the level of confidence and creative thought gained in junior drama courses and employs it within a comprehensive use of previously acquired skills. This course is a creative dramatics course with an emphasis on personal and social development, concentration, trust and cooperation, all while covering the fundamentals of theatre, the elements of basic acting as well as preparing roles through simple character development.

DRAMA 11/12: Acting

Acting is a physical form of emotion, a method of human interaction, and a moment in someone else's shoes. Since the dawn of time, we have evolved to become expert storytellers, performers, and observers. In this course, I will be harnessing this innate desire to perform in the form of various acting techniques and exercises.

Students in this class will experience theatre and film in an open, safe, fun, and comfortable environment. The variety of performances within the course will provide each student with an array of dramatic experiences, stirring within them a formidable appreciation for the arts.

THEATRE PRODUCTION 9/10/11/12 – **LINEAR Y BLOCK PM**

To produce art is a gift that should be shared with many. In this course, students will work towards one greater good: bringing theatre to the community around us. Students will study the act of production and its various genres, and then come together as a company to put forth a piece of art that we are proud to call ours while uniting our community in a creative way. From parody to seasonal productions including Remembrance, Anti-Bullying, and winter spirit, students will be working on many mini-productions throughout the year. Students will also be studying the genre specific to their major spring production before performing it for an audience, either virtually or in-person.

MUSIC

MUSIC 8: BEGINNERS' BAND

This course is an introductory course by which students are introduced to the maintenance, technique, and rudiments of a selected band instrument. Concepts such as articulation. embouchure, blend, balance, tone, and style are introduced to form a foundation of musical awareness that encourages expression, reflection, and performance. All Grade 8 band classes are a part of the junior band. Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements. Students should select Beginners' Band 8 if they have no previous experience with an instrument.

MUSIC 8: CONCERT BAND

This course is intended for students who have already taken Elementary Grade 7 Band course. The course will involve instrumental technique, performance, theory, music history, and music appreciation as they relate to the repertoire studied. All Grade 8 band classes are a part of the junior band. Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements.

MUSIC 9: CONCERT BAND

This course is intended for students who have taken a band course in Grade 8. The course will involve instrumental technique, performance, theory, music history, and music appreciation as they relate to the repertoire studied. Grade 9s make up the intermediate band, which provides leadership opportunities for more experienced players. Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements.

MUSIC 10: CONCERT BAND – X BLOCK - 8AM (Linear)

In this course, students will continue their exploration of repertoire, instrumental performance technique, and small ensemble/solo work in addition to more advanced studies in theory and music history related to the repertoire studied. Students in this class will join the Music 11 and 12 students for performances and concerts. Students are expected to attend any and all scheduled extra-curricular rehearsals and performances as part of the course requirements.

MUSIC 11/12: CONCERT BAND P1/6 (Linear)

In this course, students will continue their exploration of repertoire, instrumental performance technique, and small ensemble/solo work in addition to more advanced studies in theory and music history related to the repertoire studied. Grade 11s and 12s make up the senior band, which provides leadership opportunities for more experienced players. Students are expected to attend any and all scheduled extra-curricular rehearsals and performances as part of the course requirements.

MUSIC 8/9: JAZZ BAND – Y BLOCK – PM (Linear)

Students will gain a general knowledge of jazz styles and interpretation, as well as the techniques and rhythms unique to jazz. Students will learn fundamental jazz improvisation skills. Students in grades 8, 9 and 10 make up the Junior Jazz Band. Instruments are: trumpet, trombone, saxophone (alto, tenor, bari) and rhythm section (piano, bass, drums, and guitar). Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements. PRE-REQUISITE: students MUST have minimum one year experience on their instrument for this course AND be registered for concert band. AUDITION: ensemble placement may require audition depending on instrumentation and demand.

MUSIC 10/11/12: JAZZ BAND – Y BLOCK – PM (Linear)

Students continue developing improvisational skills, exploring jazz styles, and providing leadership within this advanced ensemble. Students in grades 10, 11 and 12 make up the Senior Jazz band. Instruments include: trumpet, trombone, saxophone (alto, tenor, bari) and rhythm section (piano, bass, drums, and guitar). Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements. PRE-REQUISITE: students MUST have minimum 2 years of experience on their instrument for this course and be registered for concert band. AUDITION: ensemble placement may require audition depending on instrumentation and demand.

MUSIC 8/9/10 – X BLOCK - 8AM (Linear)
MUSIC 11/12: CONCERT CHOIR – P1/P6 (Linear)

This course gives students a unique opportunity to learn in an ensemble made up of students from grade 8 through 12, allowing for a lot of leadership from our more advanced students, and a chance for our beginners to learn from other students who have been in the group for years. Through the exploration of repertoire, we build vocal technique, ear training skills, and music literacy. Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements. No pre-requisite.

MUSIC 8/9/10/11/12: CHAMBER CHOIR – LUNCH TIME CLASS (Linear)

This course is meant to give an advanced level of choral learning to students who have strong enough skills to participate in the ensemble. We explore advanced choral repertoire in a small ensemble context. Students are expected to attend all scheduled extra-curricular rehearsals and performances as part of the course requirements.

APPLICATIONS OF LEADERSHIP 11/12: MUSIC

This course is for the mature, dedicated music student who wish to expand their own leadership skills while working with younger musicians to improve their instrumental, vocal, and music composition abilities. Students are encouraged to consult with their music teacher before selecting this course.

DANCE

DANCE 8/9

Dance 8/9 is an introductory creative dance course. Students will learn, create, and perform dance in a variety of settings. Learning will culminate with a final evening performance at the end of the semester. A focus on collaborative skills, technique and movement dynamics will be emphasized as these are the building blocks for further dance studies. Each class will include a mix of the following: warm-up, centre exercises, across the floor exercises, choreography combinations and improvisation. These will be done in a variety of dance styles including hip hop, jazz, contemporary and many more.

DANCE TECHNIQUE & PERFORMANCE 10 - 12

Dance 10-12 is a dance course for all levels and abilities. Students will learn, create, and perform dance in a variety of settings. Learning will culminate with a final evening performance at the end of the semester. A focus on collaborative skills, technique, movement dynamics and performance skills will be utilized and analyzed. Each class will include a mix of the following: warm-up, centre exercises, across the floor exercises, choreography

combinations and improvisation. These will be done in a variety of dance styles including hip hop, jazz, contemporary and many more.

DANCE COMPANY 9/10 – X BLOCK - 8AM (Linear)

DANCE COMPANY 11/12 – P1/P6 (Linear)

Dance Company 9-12 is an outside of the timetable class for dancers who want an enrichment experience where they truly become a part of a dance ensemble. Dance Company 9-12 is a class for advanced students who will be given challenging choreography to perform in multiple extra-curricular performances. As representatives of the dance program, they will perform in multiple community events, performances, and competitions. This class is for students who are looking for a challenging and rewarding experience. Students in the class become a team that must rely on each other for success. *(*Students are also encouraged to participate in the in-schedule Dance Technique & Performance 10 – 12 or Choreography 11/12 courses.)*

CHOREOGRAPHY 11/12

Choreography 11/12 is a class for students who are interested in learning the ins and outs of what it means to be a choreographer and who are interested in taking on a leadership role with the Dance 8/9 classes. Students will create choreography in a variety of styles that will be used as across floor and combinations. Students should have previous dance experience. This is a great opportunity for students to develop the necessary skills to teach and lead a dance class. In this course, students will learn what it takes to be a choreographer and how to provide constructive feedback for fellow dancers.

APPLICATIONS OF LEADERSHIP 11/12: DANCE

This course is for the mature, dedicated dance student who wishes to expand their own leadership skills while working with younger dancers to improve their technique, vocal, and choreography abilities. Leadership Dancers will also be placed in roles to choreograph for the classes, as well as lead dance workshops for PHE Dance Units. Students are encouraged to consult with their Dance teacher before selecting this course.

INTERDISCIPLINARY COURSES

INDIGENOUS LEADERSHIP 9-12

This leadership course is designed and delivered through an Indigenous lens. Students will focus on building community and a sense of belonging by actively engaging in the school community and beyond. There will be opportunities to explore and deepen an understanding of Indigenous cultures and history through hands-on activities and through field trips. This course is open to Indigenous and non-Indigenous students.

LEADERSHIP 9/10

This course is designed for students interested in developing leadership and team building skills. Students will receive instruction in areas such as group process, communication skills, organization skills, problem solving and decision making. Students will apply what they have learned by organizing, implementing and evaluating student-oriented activities.

LEADERSHIP 11/12 – LUNCH TIME CLASS (Linear)

This course will focus on a comparison of leadership styles through group activities and event planning with the school in the community. Emphasis will be on improving and developing decision-making skills, communication and organizational skills. The class will be responsible for the planning and implementation of school activities related to school culture, school spirit and community service as well as mentoring younger students.

FIRST AID 11/12 - LUNCH TIME CLASS (Linear)

This course is geared toward promoting and learning first aid techniques and providing a first aid service for the school. Components of the program include belonging to St. John Ambulance Division, participating in a 20-hour course and receiving a standard certificate. Students will be expected to attend a class session outside of the regular timetable as well as being available during class time for first aid response.

ATHLETICS COUNCIL 9-12 - LUNCH TIME CLASS (Linear)

This is a sports leadership program aimed at motivated students who want to take part in contributing to and enhancing the athletic culture at Alpha. Athletics council class members support, promote, and showcase our student-athletes and the athletic program through minor officiating, score keeping, social media management, organizing intramurals, organizing events, and promoting events. **Please note that this course is linear, meets outside the regular timetable, and requires after-school commitment.** See Ms. Norris for more information.

OFFICE ADMINISTRATION 11/12

This leadership course provides self-motivated students with an opportunity to learn and develop the interpersonal skills required to work as a modern administrative assistant. Individuals should be organized, reliable, and efficient. The knowledge you gain here will provide you with a foundation for entry into a wide variety of office careers.

PEER TUTORING 11/12

The Peer Tutoring Program is an integral component of the supportive learning services provided at Alpha Secondary School. This course prepares and motivates students to provide assistance to individuals with a variety of academic needs. Peer tutors are matched with a student or group of students to facilitate academic support. Students will develop social responsibility while acquiring skills in communication and interpersonal relations. This course is suitable for mature, responsible students who are interested in working with students with various learning needs.

APPLICATIONS OF COMPUTER TECHNOLOGY 10

This course is designed to allow students to explore technology related topics and applications and provide a leadership role in the school by supporting teachers and students in the use of technology. It is a hands-on course that introduces students to a variety of electronic devices and provides them the knowledge to effectively troubleshoot and maintain this equipment. It is meant to develop technical knowledge and promote problem solving, as well how to work well with others and independently.

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wide variety of technology-based areas encompassing both hardware and/or software. This student-centered course allows students to work on intermediate projects independently or in groups with no limits to the complexity of issues to be developed. Students will utilize experiential learning to conceptualize an issue, learn and experiment a solution, use appropriate tools or strategies, and reflect on the outcome. Students can take control of their learning by proposing student-centered projects, designing their learning, and coming up with solutions either independently or with help from their peers or the instructor.

PHYSICS 11 and ENGINEERING 11: APPLIED SCIENCE (Y BLOCK – PM CLASS linear class, 8 credits)

This course is a combination of Physics 11 (science credit) and Engineering 11 (ADST credit). Engineering 11 provides students the opportunity to apply their Science and Math knowledge to practical projects that demand creative, critical, and problem-solving skills while manipulating various materials with machine and hand tools. The objective is to offer a course that delivers an exhilarating and uniquely rigorous curriculum for students looking for a challenge that helps prepare them for postsecondary.