

ALPHA

Course Planning Booklet

2021-2022

ÉCOLE ALPHA SECONDARY SCHOOL

4600 Parker Street, Burnaby, B.C. V5C 3E2

Telephone: (604) 296-6865 Fax: (604) 296-6868

Website: alpha.burnabyschools.ca

Principal: Tim Wozney

Vice-Principal: Ben Paré A-L

Vice-Principal: Mimi Lim M-Z

Table of Contents

EDUCATIONAL PLANNING.....	5
Planning for Success	5
CHOOSING COURSES	5
POST-SECONDARY INFORMATION	5
ADVANCE PLACEMENT (AP) COURSES	5
FRENCH IMMERSION PROGRAM	8
Grade 8 – 10 Courses	8
Grade 11 – 12.....	10
(Courses Required or Dual Dogwood):	10
Options for Extra Credits:	11
APPLIED DESIGN, SKILLS AND TECHNOLOGY	12
Home Economics	12
Technology Education	14
Business Education	17
INFORMATION AND COMMUNICATIONS TECHNOLOGY	20
INTERDISCIPLINARY COURSES	21
ENGLISH LANGUAGE LEARNING (ELL)	22
ENGLISH	23
Alpha’s Enrichment English Program (8-12)	24
English Electives:.....	27
SOCIAL STUDIES.....	28
Senior Courses – Offering schedule.....	29
Courses Offered Every Year:.....	29
Senior Courses Offered for 2021-2022	30
Senior Courses Offered for 2022-2023	31
MATHEMATICS	31
Workplace Mathematics Pathway (Grades 10-11)	31
Pre-Calculus Mathematics Pathway (Grades 10-12)	32
Foundations Mathematics Pathway (Grades 11-12)	32
SCIENCE.....	35
DISCOVERY SCIENCE 8/9 – ACCELERATED	35

LANGUAGES	37
PHYSICAL & HEALTH EDUCATION.....	40
VISUAL & PERFORMING ARTS.....	42
Dance Courses	42
Music.....	43
Drama Courses.....	45
Visual Arts	46
CAREER PREPARATION PROGRAMS	47
Work Experience Graduation Requirements	48
YOUTH TRAIN IN TRADES.....	48
Industry Connect.....	48
Industry Certification	49
INDUSTRY TRAINING PROGRAMS (ACE IT).....	50
What Is Istep?	50
Youth Training in Trades - Ace It.....	50
Youth Training In Trades Program Options - Ace-It.....	50
YOUTH TRAINING IN TRADES PROGRAM (SSA).....	51
DISTRICT PROGRAMS HOSTED AT ALPHA	51
Burnaby School District Hairdressing Program.....	51
Robotics (Mechatronics).....	52

COURSE SELECTION 2021 - 2022

This Course Selection book provides students and parents with the necessary information to develop a meaningful educational plan for the graduation program.

EDUCATIONAL PLANNING

Planning for Success

As a student at École Alpha Secondary School the path to future success relies on your active involvement. The key to success is **you**! Good planning takes time and thought. Your course selection is an important decision. Discuss your goals with your parents/guardians and counsellor. In selecting courses, particularly for Grade 10 and 11 students, post-secondary options should be considered.

Many opportunities are available here at Alpha. Make your high school years challenging as well as enjoyable.

- The information that you provide is used to build our timetable and determine staffing
- Every effort will be made to provide you with the courses that you have selected
- Because of various timetable constraints your initial course requests may have to be adjusted
- Students are expected to take at least 8 courses per year
- Students may take a 9th or 10th course that is scheduled before or after the regular school day

CHOOSING COURSES

We encourage students to read course descriptions carefully and consult with their parents/guardians and their counsellor before finalizing course selections for next year.

POST-SECONDARY INFORMATION

Each student is responsible for ensuring that selected courses meet post-secondary requirements in accordance with his/her learning plan. If you have questions, please meet with your counsellor.

ADVANCE 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 5 or 4 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 ordering AP exams. 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 approximately \$135 (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 November 1st and 2nd 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 BIOLOGY 12

The key concepts and related content that define the revised AP Biology course are organized around a few underlying principles: 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.

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 ENGLISH LITERATURE & COMPOSITION 12

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to



deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

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 Biology 11 is highly recommended.*

AP FRENCH LANGUAGE & CULTURE 12

This course strives to develop a superior level of skills emphasizing the use of the language for communication in a variety of contexts. Students will increase their vocabulary through reading magazines, newspapers, literary works, and other nontechnical articles. This course will emphasize oral presentations, development of listening skills and a further appreciation of culture.

AP HUMAN GEOGRAPHY 12

The purpose of the AP course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Topics of study include urbanization and patterns of urban development, agriculture, demographics, industry and its location, spread of world languages and religions, and different uses of space by various cultures.

AP MACROECONOMICS 12

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

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 12

This course is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

AP PSYCHOLOGY 12

The AP Psychology course is designed to introduce students to the systematic and scientific study of behaviour and mental processes of human beings and other animals. This course is recommended for those students who have an interest in a comprehensive study of the breadth and depth of Psychology and may wish to pursue it further at a post-secondary institution. This course focuses on developing student skills



that will help them succeed in a post-secondary setting. This will include critical thinking, essay writing, research and experimental methods, academic reading, and oral presentation skills.

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. A.P. Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data.

FRENCH IMMERSION PROGRAM

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)
- Art dramatique (Drama)

In grade 11 and 12, they take a Français Langue (French Language) course each year for a total of two courses, and one Sciences Humaines (Social 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 AP French Language and Culture exam on request.

Grade 8 – 10 Courses

FRANÇAIS LANGUE 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, watching movies 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. The new curriculum also 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. The Mathematics 8 Honours course has the same learning outcomes as Mathematics 8.

SCIENCES NATURELLES 8

The course will utilize a variety of learning strategies including lab work, projects, and individual and small group work. Students will receive several field experiences to enhance their learning in both curricular areas. The Science topics will include cells and systems, optics, fluids and dynamics, and water systems on Earth.

FRANÇAIS LANGUE 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. The Mathematics 9 Honours course has the same learning outcomes as Mathematics 9.

SCIENCES NATURELLES 9

The course will utilize a variety of learning strategies including laboratory work, projects, and individual and small group work. Students will also receive several field experiences to enhance their learning in both curricular areas. The Science topics will include cells and systems, optics, fluids and dynamics, and water systems on Earth.

FRANÇAIS LANGUE 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 Gr. 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. At the end of this course, (space providing) students may decide to write the Numeracy Assessment required for graduation.

SCIENCES NATURELLES 10

Sciences Naturelles 10 completes the curriculum for grade 10 science with four major units: Ecology: biomes, energy flow, nutrient cycles and ecosystems; Physical Science: atomic theory, chemical reactions and radioactivity; Physics: velocity acceleration, direction and positioning; and Energy Transfer: earth's atmosphere, climate change, and plate tectonics. *A compulsory Sciences Naturelles 10 Provincial Exam will account for 20% of the final mark.*

ÉDUCATION À LA VIE PROFESSIONNELLE

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 Required or Dual Dogwood):

SCIENCES HUMAINES 11: EXPLORATIONS (Required in Grade 11)

The Exploration course is designed to give students an overview of modern society, focusing on the relation between people, actions and their consequences on society. The Sciences Humaines 11 students will go deeper into the exploration of different aspects of Social Studies. Students will explore at least three of these themes: social and cultural development, colonialism, politics, natural resources and their exploitation, Asian studies, First Nation studies, geography and/or philosophy. At the end of this course, students will be able to evaluate the influence of people on evolution of society, they will analyze documents



and evaluate their credibility. Also, they will compare continuity and change according to places, groups of people, events and ideas by exploring different points of view in the course of World History and drawing their own conclusions.

LANGUE ET CULTURE DE LA FRANCOPHONIE 11 (Required in Grade 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 12 (Required in Grade 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.

LANGUE ET CULTURE DE LA FRANCOPHONIE 12

Language and Culture of the French-Speaking World 12 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.

Options for Extra Credits:

ÉTUDE DU CINÉMA ET DE LA LITTÉRATURE FRANCOPHONE 11/12

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. The following are possible focus areas in French-Language Film and Literary Studies 12: film genres: drama, comedy, action, history, biography, cloak-and-dagger, crime, adventure, science fiction, horror, silent films, documentaries, short films, propaganda, animations, trailers, television series, film adaptations of literary works, film reviews, National Film Board of Canada, Radio-Canada, TV5, Aboriginal Peoples Television Network (APTN), literary genres: storytelling, poetry, plays, essays, comics, short stories, novels, albums, graphic novels, French-language literary and cinematographic works by era and geographic location, First Peoples stories and documentaries in French.

FRENCH LEADERSHIP 11

This course is open to grades 9-12. This course focuses on a variety of leadership styles and emphasizes improving and developing decision making skills, communication and organizational skills, while students continue to practice and expand their French language skills. This class will be responsible for the promotion of French Language events related to cultural activities, school culture and spirit and community service. Students will have completed Immersion or French 12 or can take this course simultaneously with their Senior Language course. This course does not replace a required course in the Immersion Program or a required Language credit for post-secondary.



APPLIED DESIGN, SKILLS AND TECHNOLOGY

Home Economics

ADST 8: FOOD STUDIES & TEXTILES DESIGN/TECHNOLOGY EDUCATION

For the first $\frac{1}{4}$ of the term of classes, students will focus on Textiles Design. Students will learn hand-sewing skills and machine skills. They will complete 3 projects and have the opportunity to do a small-scale personalized image on their apron and create and design their own pocket. Students will also learn the properties of fibres, the importance of colour and the appreciation of proportion and texture in the Fashion Industry. Upon completion of the Textiles Design component, students will then move into the Foods lab for the remaining $\frac{1}{4}$ of the term. Here, students will learn the basics of food safety and food preparation. Labs include cookies, muffins, pizza, French toast, smoothies and quesadillas. Kitchen basics, the role of ingredients and nutrition will be introduced. Total time: $\frac{1}{2}$ semester/term. For the remaining $\frac{1}{2}$ semester/term, students will experience design, programming, robotics, woodworking, electronics and more... in the **Technology Education (see course description in the Technology Education section)**.

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 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: pyjamas, 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 are 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: TEXTILES 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: Year B (next offering year is Sept 2021---Food Safe Level 1 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 quick breads, soups, pastas, 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: Year A (next offering year is Sept. 2022 –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, smoking, 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.

TEXTILES 11: DESIGN AND CRAFTING

Students will construct more advanced garments, crafts, accessories and household items. Possible projects include lined jackets/coats, pants and skirts, evening wear, dresses, knits and craft items. Students will explore and study careers in the design, production and marketing of clothing and textiles, historical influences on fashion and textile choices and an advanced study of the properties, selection and care of natural and manufactured fibres and yarns, advanced fabric and sewing terminology and Canadian Fashion Designers. Discussions will include the ethical and economic issues in 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 12: Year B (next offering year is Sept 2021---Food Safe Level 1 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 quick breads, soups, pastas, 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 12: Year A (next offering is Sept. 2022–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, where by 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, smoking, 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) –Offered September 2021

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 Quickbreads, Yeast Breads, cupcake decorating, chocolate versus cocoa, custards, mousses, cookie decorating and more! There are no prerequisites. 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 A) 7:30 am X- Block

This course is the same as above, only that it is offered outside the standard timetable. Classes begin at 7:30 am and run until 8:35am.

Note: Baking 11 & Baking 12 Year B will be offered September 2022

TEXTILES 12: DESIGN AND CRAFTING

Challenging fabrics, challenging techniques and personal design will be emphasized in this course. It is highly advised that students have good background knowledge and skills in the Textiles area. Students will construct advanced textile items using challenging fabrics and patterns. Possible projects include tailored garments, evening and special occasion wear, personal design and swimwear/yoga wear. Students will explore and study International fashion designers, environmental and global issues in the clothing and textile industry, careers in the production and/or marketing of clothing and textiles, political influences on fashion and textile choices and an advanced fabric study including fibre identification, fabric qualities and the appropriate selection for various garments based on these characteristics. A small selection of fabrics is available for use in lab; however, students are encouraged to purchase their own materials based on personal preference.

Technology Education

ADST 8: TECHNOLOGY EDUCATION / HOME EC: FOODS STUDIES AND TEXTILES

DESIGN Combination Course

This is a half-semester/term course which provides the opportunity to learn the safe uses of a variety of hand and machine tools. The course will also cover the processes involved in working with a number of different materials such as wood, plastics, metals, fabrics, etc. In addition, students will build functional electronic circuits, use computers in the design process and design their own solutions to a variety of technological problems. This is a ½ semester course. Students will spend the other ½ semester/term in Home Economics 8—See above under Home Ec.... for the Foods Studies/Textiles Design course description.

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.



ADST 9/10: MEDIA ARTS 9 or MEDIA DESIGN 10

This is an introductory course and will involve studying digital media and a variety of traditional art forms such as photography and visual arts. Students will acquire communications skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process.

ADST 9: DRAFTING

(Technical Design) Students will explore basic drafting that will demonstrate architectural, mechanical and computer aided design (CAD) and model construction. *There are no prerequisites for this course.*

ADST 9: ELECTRONICS & 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. *There are no prerequisites for this course.*

WOODWORKING 9-12

Course develops 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. *There are no prerequisites for this course – it can be taken for the first time in any of grades 9-12.*

FURNITURE AND 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. *There are no prerequisites for this course – it can be taken for the first time in grade 12.*

DRAFTING 10

During this introductory year, students will explore how to create basic drawings on the computer using Sketchup, AutoCAD, and possibly other software applications. Some hand drawings may be required. The curriculum is designed to provide learning opportunities for male and female students with a wide range of abilities. Areas covered are basic shapes, orthographic projection, dimensioning and pictorial views. Students will be given designing and construction problems in these areas. They will be required to work cooperatively and to communicate their ideas to others. *There are no prerequisites for this course – it can be taken for the first time in grade 10.*

ELECTRONICS & 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. *There are no prerequisites for this course – it can be taken for the first time in grade 10.*



TECHNOLOGY EXPLORATIONS 10: ROBOTICS, MECHATRONICS, ELECTRONICS

This course introduces students to the design and construction of robots using the VEX Robotics and Arduino platforms. This course applies science, technology, engineering and math (STEM) and is largely project based. The course will focus on concepts such as torque, gearing and leverage, which are taught throughout. Students will learn about various input methods (analog vs digital), explore the uses of various sensors, and incorporate them into their designs. The annual game for the VEX Robotics competitions drives the design component of this course. Students receive a basic introduction to computer programming (EasyC, as well as Arduino IDE, both C derivatives), and students will have various opportunities to work individually and in groups. ***There are no prerequisites for this course – it can be taken for the first time in grade 10.***

DRAFTING 11

The Drafting and Design curriculum provides students with challenging opportunities to develop their skills through a practical, hands-on learning environment using project-based activities. During this senior year, students will explore how to create basic drawings on the computer using the Sketchup and AutoCAD applications. Some hand drawings may be required. Areas covered are basic shapes, orthographic projection, dimensioning, pictorial views, developments, sections, architectural, and mechanical drawings. Students will be given designing and construction problems in these areas. Students will be required to work cooperatively and to communicate their ideas to others. The curriculum is designed to provide learning opportunities for male and female students with a wide range of abilities. ***There are no prerequisites for this course – it can be taken for the first time in grade 11.***

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. ***There are no prerequisites for this course – it can be taken for the first time in grade 11.***

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. ***There are no prerequisites for this course – it can be taken for the first time in grade 11.***

DRAFTING 12

The Drafting and Design curriculum provides students with challenging opportunities to develop their ability at a higher level through a practical, hands-on learning environment using project-based activities. During this senior year students will explore how to create basic drawings on the computer using the VectorSketchup and AutoCAD applications. Some hand drawings will be required. Areas covered are basic shapes, orthographic projection, dimensioning, pictorial views, developments, sections, auxiliary views, architectural, site plans and mechanical drawings. Students will build on the concepts learned in Drafting 11 and apply these design principles and processes to more advanced situations. Those students that enjoyed Drafting in a previous year can continue working on more challenging activities. Students will continue with computer work, drawing shapes and designing work. ***There are no prerequisites for this course – it can be taken for the first time in grade 12.***



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. ***There are no prerequisites for this course – it can be taken for the first time in grade 12.***

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. ***There are no prerequisites for this course – it can be taken for the first time in grade 12.***

SKILLS EXPLORATION 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. ***There are no prerequisites for this course – it can be taken for the first time in grades 10, 11, or 12.***

Business Education

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.

ADST 9: MEDIA ARTS 9

Media Arts 9 is an introductory course and will involve studying digital media and a variety of traditional art forms such as photography and visual arts. Students will acquire communications skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process.

ADST 9: ENTREPRENEURSHIP & 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 & 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.

ACCOUNTING 11

Accounting 11 is a valuable course that will benefit students in learning how to manage and account for personal and business finances. This introductory course is fundamental for any student wanting to pursue business after graduation. In Accounting 11 students will explore:

- The role of accounting in business
- Accounting principles and practice
- Accounting equation, debit and credit, accounting cycle
- Preparation process of financial documents
- Financial decision making
- Explore the variety of career paths in accounting and hear from guest speakers.

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

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



AP MICROECONOMICS 12

AP Microeconomics is to provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger 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 MACROECONOMICS 12

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.

FINANCIAL ACCOUNTING 12

This is a valuable course for students who plan to follow a career in Accounting or business.

Students will focus on payroll accounting; taxation, inventory control, accounting for tangibles and intangibles, and organizational structures. Students will also explore career options in the accounting field. The curriculum focusses on strategic management decision making skills as well as interpersonal and presentation skills.

E-COMMERCE 12

This course introduces students to owning and operating an e-commerce business, while applying marketing fundamentals. Students will gain valuable future employability skills such as managing staff, communication and leadership, marketing goods and services, developing and implementing new and innovative ideas. In this course students will have the opportunity to manage the school store, LEGENDS. Some of the main activities/topics include:

- Conduct market research and evaluate existing local and global competition
- Design and implement inventory, marketing, accounting, and personnel plans
- Gain hands-on experience with the evolution and nature of e-commerce
- Learn cyber-marketing strategies to direct traffic to websites
- Explore distribution channels for a digital business
- Create advertisements for print, radio, television and e-commerce

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 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



INFORMATION AND COMMUNICATIONS TECHNOLOGY

COMPUTER STUDIES 10 (Networking, Security, and Programming)

Computer-literacy is a necessary skill for success in today's digital world. This course allows for students to explore and develop their understanding of computers and build a foundation of digital literacy skills. Students will:

- Learn how to manage a computer by studying its hardware components, operating system, software selection, networking, and security.
- Learn basic algorithms used in processes for problem solving, an essential first step in writing computer programs.
- This course does not require a prerequisite and is suitable for both beginner and intermediate computer users.
- Learn digital business applications for word processing, spreadsheets and presentations

COMPUTER PROGRAMMING 11

Coding is becoming one of the most important skills for 21st century job seekers. In this introductory programming course, students will explore different types of computer languages. Students will:

- Learn to code in JavaScript, HTML, and CSS to build their own interactive webpages.
- Learn to code in Python, a widely used programming language in web development and app building, to create their own programs.
- This course does not require a prerequisite and is suitable for both beginner and intermediate computer users.

DIGITAL COMMUNICATIONS 11

In this course students will develop transferable skills that they will use in high school, post-secondary, and career pursuits. Students will learn how to use digital communication effectively in a variety of environments. Students will explore:

- Communication using digital tools- word processing, spreadsheets, social media, and blogs
- Impact of social media and language- text based, instant messaging, emojis and memes
- Risks, ethics and legalities in digital communication
- Persuasive writing and critical evaluation of resources
- How to maintain a positive public (professional) profile

GRAPHIC PRODUCTION 11

In this course, students develop skills in design through various software, including (including Photoshop and Illustrator), image editing, and graphic animation.

- Participate in collaborative research on the history and future of digital media
- Applying skills in technology to create balanced and original products
- Learning the ethical and legal consideration of graphic media

COMPUTER PROGRAMMING 12

This course introduces students to Java, one of the most popular programming languages today. Students will:

- Learn how to analyze and solve problems using the principles of effective programming practices.
- Participate in inquiry-based learning, in which they identify a problem or a need and develop solutions.



- Develop their own programs and create games.
- Computer Programming 11 is a recommended prerequisite for this course

DIGITAL MEDIA DEVELOPMENT 12

Design processes are an ongoing reflective practice. Students in this course will be engaged in design content that can influence the lives of others.

Students will explore 2D, 3D, audio and visual software on established platforms as well as freeware. Students will explore the principles of user-centered design. Ethics and cultural appropriation of design will be explored in all projects.

INTERDISCIPLINARY COURSES

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.



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 11/12

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

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.

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.

SELF-EFFICACY: MIND & METHODS

Self-Efficacy is the belief one has in their own abilities, specifically their ability to meet the challenges ahead of themselves and complete a task successfully. Effective self-efficacy enables students to know their strengths and challenges in learning. Here's a chance to delve into one's own learning patterns based on the Multiple Intelligence model. The topics are: Learning Styles, Awareness, Communities, Respect, Stress and Anxiety, and Perspectives in conflict resolution.



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.

Mentoring is a “way of being” ...it’s about being a person that others feel comfortable talking to because they sense that you care, in a non-judgmental way

PEER MENTORING 11

This course is offered “outside of the timetable”. Students will attain their hours by attending classes at 3:00 on Tuesday afternoons, planning and organizing Collab Wednesdays and supporting many events that are offered during the school year. Peer Mentors will work with new students to Alpha; particularly with our new International Students and our new grade 8’s. Peer Mentors will act in a leadership role to support the learning community in a variety of ways, including facilitating grade 7 visits and connecting to our elementary schools through cultural and team building activities. Course content will cover the following skills: communications, organization, time management, presentation and planning skills.

PEER MENTORING 12

This course is offered “outside of the timetable”. Students in Peer Mentoring 11 will be combined with students in Peer Mentoring 12. Students will also attain their hours by attending classes at 3:00 on Tuesday afternoons, planning and organizing Collab Wednesdays and supporting many events that are offered during the school year. Peer Mentors will work with new students to Alpha; particularly with our new International Students and our new grade 8’s. Peer Mentors will act in a leadership role to support the learning community in a variety of ways, including facilitating grade 7 visits and connecting to our elementary schools through cultural and team building activities. Course content will cover the following skills: communications, organization, time management and presentation and planning skills. Additional topics will include team building, learning styles, leadership and building your resume for the future.

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.

ENGLISH LANGUAGE LEARNING (ELL)

ELL LEVEL 1: LANGUAGE & LITERACY

Students will develop basic skills in reading, writing, listening and speaking through conversation, classroom expression, and with words and structures needed for communication. Initially students focus on familiar, concrete themes and connections to family and communities. This is a non-credit course.

ELL LEVEL 1: CULTURAL STUDIES

Cultural Studies explores the interaction of students and their communities. Students focus on familiar, concrete environments of family and communities. Emphasis is placed on scaffolding language to support critical thinking. Exploration of current events plays a key role in connecting immigrant students to their community. This is a non-credit course.



ELL LEVEL 1: SCIENCE APPLICATIONS

Students focus on topics that are concrete and familiar. Emphasis is placed on scaffolding language to support critical thinking. The major streams of life science, physical science, earth and space science are explored through essential questions: What is science? What is life and how is it sustained? What is energy and how is it transferred? What is matter and how does it behave? How are landforms created and how do they change? What is Earth's relationship to the universe? This is a non-credit course.

ELL LEVEL 1: TECHNICAL & APPLIED LANGUAGE

This course supports students in their curricular areas through the acquisition of the cultural and linguistic knowledge. Teachers use real life materials and situations to provide adequate context for students. Students will understand text features, comprehend basic content vocabulary, make predictions from text, and use words and phrases in social routines.

ELL LEVEL 2: LANGUAGE & LITERACY

As students' linguistic abilities increase, topics extend to more abstract concepts that apply in both local and global communities. Emphasis is placed on scaffolding language to support critical thinking. A wide range of literary and factual genres including short stories, novels, poems and plays, biographies and expository writing are included to develop an understanding of how authors use language to communicate effectively with their intended audience. This is a non-credit course.

ELL LEVEL 2: CULTURAL STUDIES

Topics in level 2 cultural studies extend to less familiar national and international communities. The major themes of society, politics and law, economy and technology and environment are explored through essential questions: What makes a good citizen? How does physical location affect what you can and cannot do? How do we get power? What is culture? This is a non-credit course.

ELL LEVEL 2: SCIENCE APPLICATIONS

The purpose of level 2 science applications is to support literacy development for ELL students enrolled in regular science courses. Emphasis is placed on the development of all four language strands—listening, speaking, reading and writing. Teachers introduce or reinforce a literacy strategy or skill to inform practice and application to content. This is a non-credit course.

ENGLISH 10: LANGUAGE ADAPTED

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.

SOCIALS 10: LANGUAGE ADAPTED

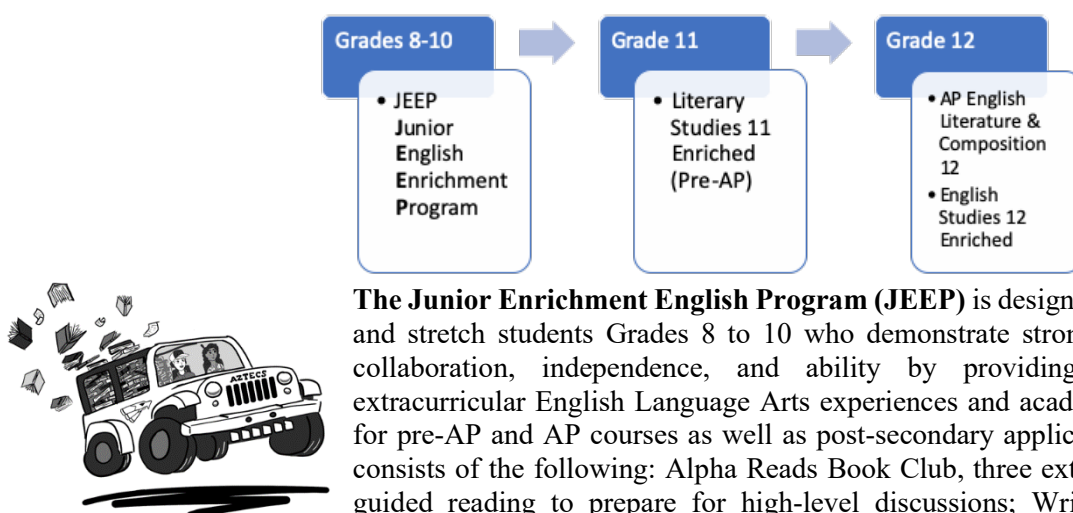
While developing their proficiency in English, this course acquaints students with Canadian geography, history, government, law, culture, customs and current events. In addition, it allows students to explore Canada's role in the global community. A wide range of strategies will be used to teach students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

ENGLISH

English (Language Arts) is required in Grades 8 through 12 for high school graduation. The work in each year's English course builds upon the concepts and skills that have been acquired in previous years.



Alpha's Enrichment English Program (8-12)



The Junior Enrichment English Program (JEEP) is designed to inspire, challenge, and stretch students Grades 8 to 10 who demonstrate strong work ethic, passion, collaboration, independence, and ability by providing them with vibrant extracurricular English Language Arts experiences and academic skill development for pre-AP and AP courses as well as post-secondary applications and study. JEEP consists of the following: Alpha Reads Book Club, three extracurricular novels and guided reading to prepare for high-level discussions; Writer's Den, a biweekly writer's workshop for creative writing; writing & reciting contest participation; and specialized field trips, including Celebration of Learning and eligibility for Golden Quill awards. (*JEEP logo by Laura Powell)

Students in grades 8-10 can self-select to be in the Junior Enriched English Program (JEEP)

****PLEASE NOTE THAT THE JEEP PROGRAM REQUIRES STUDENTS TO MEET WITH OTHERS NOT IN THEIR LEARNING GROUP. THIS MEANS THE PROGRAM WILL NOT BE ABLE TO RUN UNTIL THE CURRENT HEALTH AND SAFETY RESTRICTIONS/RULES ARE LIFTED. TEACHERS WILL PROVIDE ENRICHMENT TO INDIVIDUAL STUDENTS WITHIN INDIVIDUAL CLASSES.**

ENGLISH 8

In English 8, students will focus on developing the fundamentals of oral and written composition. Assignments will require that students write in a variety of formats and for a variety of purposes. Coherent paragraph development and study skills will be emphasized. Students will study short stories, poetry, novel(s), drama, and multi-model texts.

ENGLISH 9

English 9 continues the formal study of literature and will provide students with a wide range of reading experiences. Students will study short stories, poetry, novel(s), drama, non-fiction prose, and new media texts. A focus on writing, with an intensive approach to composition, provides students with an abundance of writing experience and teaches them the essential skills of revising, editing and reflection.

ENGLISH 10 – Choose one:

In grade 10, students are expected to choose an English course according to their interests. Each course will focus on developing a student's comprehension (reading, listening, viewing) and communication (writing, speaking, representing) skills.

COMPOSITION 10 (4 credits)

This course provides students with opportunities to think critically as they explore, extend, and refine their writing skills. They will study a wide range of texts and develop their writing processes of drafting, reflecting, and revising through essays, reports, persuasive compositions, and creative works. Through this course, students will become more skilled and capable writers. **This course provides credit in Composition 10 and Focused Literary Studies 10.**



CREATIVE WRITING 10 (4 credits)

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.**

FILM STUDIES 10 (4 credits)

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.**

MYSTERY 10 (4 credits)

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.**

NEW MEDIA LAB 10 (4 credits)

The New Media 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. **This course provides credit for New Media 10 and Composition 10.**

ENGLISH 11: Choose one:

In grade 11, students are expected to choose one four-credit course to fulfil provincial graduation requirements. Additional English courses may be taken as electives.

COMPOSITION 11/12 (4 credits)

This course provides students with opportunities to think critically as they explore, extend, and refine their writing skills. They will study a wide range of texts and develop their writing processes of drafting, reflecting, and revising through essays, reports, persuasive compositions, and creative works. Through this course, students will become more skilled and capable writers.

CREATIVE WRITING 11/12 (4 credits)

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 STUDIES FIRST PEOPLES 11 (4 credits)

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.

FILM STUDIES 11 (4 credits)

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. This course provides credit for New Media 11.

LITERARY STUDIES 11 ENRICHED (4 credits)

*Recommended for students who are interested in taking AP English Literature

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 LAB 11/12 (4 credits)

The New Media 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.

POWER OF VOICE 11/12 (4 credits)

Students will individually and collaboratively study, create and use language to produce original pieces in a variety of ways to explore how “Voice is powerful and Evocative.” This course will be taught in a Socratic seminar format. We will be using a variety of texts including film, TED Talks and short stories. This course provides credit for Spoken Language 11 or 12.

ENGLISH 12: Choose one:

In grade 12, students are expected to choose one four-credit course to fulfil provincial graduation requirements. Additional English courses may be taken as electives.



ENGLISH STUDIES 12 (4 credits)

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 (4 credits)

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 STUDIES 12 ENRICHED (4 credits)

This course option is for students who wish a rich and challenging classroom environment without the additional pressure of preparing for the AP English Literature & Composition exam. Students who choose this option will be placed in the AP English Literature 12 class and therefore will learn to read sophisticated texts and write with maturity and complexity. The learning standards and levels of assessment for this course are the same as for regular English Studies 12. Students who choose this option will receive credit for English Studies 12 only (4 credits). **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)

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, will hone their analytical skills, and will learn to write with sufficient richness and complexity to communicate effectively with mature readers of literature. This course 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. *The Advanced Placement exam is optional.*

English Electives:

The courses listed below may be taken as additional English credits.

CULTURAL EMPOWERMENT THROUGH LANGUAGE 11 (CEL 11) (4 credits)

This course will enable students to enhance their language proficiency in the areas of listening, speaking, reading and writing. Students will critically inquire into, deconstruct, create and communicate a range of different texts. This course will encourage students to continue to develop an understanding and appreciation of the diversity of cultures in Canada while still developing and preserving pride in their own heritage and language.

ENGLISH LITERATURE 12 (4 credits)

This is a fun class with an academic focus for students who like to read, discuss, and write about literature. It offers students curious about literature 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.



FILM CAFE 12 (4 credits)

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. This course provides credit for New Media 12.

* Grade 12 students can also take any of the following as an elective (in addition to English Studies, English Studies First Peoples or AP English): Composition, Creative Writing, New Media Lab, or Power of Voice. (Descriptions of these courses can be found with the English 11 course descriptions.)

SOCIAL STUDIES

SOCIAL STUDIES 8

Students will explore the rise and fall of several major civilizations while developing their understanding of the diverse world of cultures that surround us. Focus will be on how cultures interacted with one another, and how contact often led to conflict. Themes such as exploration, expansion, and colonization will be used to address political, social and cultural change. Students will also look at how the relationship between humans and the environment helped shaped society. Students will develop their skills at assessing documents (writings, drawings, records) for bias in order to understand history as more than a collection of facts, critical and creative thinking to compare and contrast aspects of the cultures being studied. Enrichment opportunities will be integrated into the classroom and students can express their interest and ability while being guided by their teacher. Regular classroom instruction and assessment will be augmented with extension projects or enrichment components that students choose to work on with the help of their teacher. Curiosity and inquiry will be the primary drivers for students.



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. Revolutions and rebellions are a major topic of interest, including events in Europe and North America, and the impact these had on migrating peoples and indigenous peoples. Along with the physiographic regions of Canada, the other major component is the development of Canada as a nation, how its identity was created in the first fifty years after Confederation, and how that impacted our relationship with First Peoples, our American neighbours, and European contacts. This historical context will be compared to modern-day conflicts and challenges that face Canada today, such as immigration and trying to come to terms with historical wrongs. 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. Enrichment opportunities will be integrated into the classroom and students can express their interest and ability while being guided by their teacher. Regular classroom instruction and assessment will be augmented with extension projects or enrichment components that students choose to work on with the help of their teacher. Curiosity and inquiry will be the primary drivers for students.

SOCIAL STUDIES 10

Social Studies 10 covers much of the same material as Social Studies 11 used to, as that course is being phased out. Student 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 a result of or can be compared to events in the 20th Century. Key issues concerning political institutions and ideologies, First Peoples self-governance, and discriminatory policies will be examined, in conjunction with Canada's role in global affairs as they look at economic inequality and development, the human-

environment interaction, and other population pressures. Enrichment opportunities will be integrated into the classroom and students can express their interest and ability while being guided by their teacher. Regular classroom instruction and assessment will be augmented with extension projects or enrichment components that students choose to work on with the help of their teacher. Curiosity and inquiry will be the primary drivers for students.

SOCIAL STUDIES 11: Explorations

Social Studies 11: Explorations will allow students to get some exposure and introduction into the other senior social studies courses. There are a total of fourteen Big Ideas that teachers can choose from to build a framework for their classes, choosing several different ones to fit the needs of the class. There could be a variety of content amongst teachers, and some teachers may choose to team teach if scheduling permits, allowing a maximum amount of flexibility to provide content to students. Regardless of content being covered, all students who take this course will have the same expectations when it comes to curricular competencies, such as using inquiry methods, comparing cultural phenomena across time and space, making ethical judgements about decisions and information and understanding trends and patterns in human development.

Senior Courses – Offering schedule

The most popular Senior Courses will be offered every year. Courses with traditionally lower enrolment will be offered on a rotating schedule of 2 years. Since all senior courses can be taken in either Gr.11 or Gr.12, this allows us to offer more courses, but students will need to plan ahead to make sure they get all of the courses they want.

Courses Offered Every Year:

20th CENTURY WORLD HISTORY 12

This course looks at the major events of the 20th century, with a focus on the growth of Nationalist movements and political changes that occurred in the century, and the resulting local and global conflicts that arose. 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. Students will have the opportunity to analyze information from a variety of sources, and assess the validity and accuracy of data, and how that data shapes our view of the past.

GENOCIDE STUDIES 12

This course looks at what genocide is and why it happens. Students will look at the social, political, economic, and cultural conditions for genocide to occur and the how those spheres are impacted by the intentional attempt to eradicate a people. Students will look at genocide through a contemporary and historical context, through different peoples' lenses, and critically assess why such events take place despite attempts to prevent genocide. Global and regional influences will be examined, with the goal of seeing that local conflicts often involve or influence on a much larger the scale the Earth as a whole; the impact of technology on the size and scale of genocide will also be examined.

LAW STUDIES 12

The course will provide a comprehensive introduction to law and the legal process, particularly as they relate to the Canadian justice system. 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 will analyze the history of law in Canada as it pertains to such things as past social injustices, and ethical decision making.

PSYCHOLOGY 12

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.

SOCIAL JUSTICE 12

The course has three focus areas: defining social justice, recognizing, confronting and overcoming injustice, and moving toward a socially just world. Students will be active participants in class discussions, will use inquiry and critical and creative thought to examine issues of injustice, and will develop an action plan to address a selected issue. Students will examine the connectedness of social justice issues both locally and abroad, while using inference and the assessment of different points of view to reach a deeper understanding of past and present issues. This will be a stimulating course for students interested in taking the initiative to direct their own learning and to use their acquired knowledge and skills to help create a socially just world.

Senior Courses Offered for 2021-2022

COMPARATIVE CULTURES 12

This course will look at elements of culture and cultural expression and how those aspects of a civilization change over time. Students will use different perspectives and an inquiry model to examine things like conflict, governance, systems of power and authority, and value and belief structures. Students will assess the impact to cultures things like technology and art have had over generations, and evaluate how cultures share, dictate to, and develop with one another. The course looks at both European and non-European civilizations over a wide range of countries and periods in history.

HUMAN GEOGRAPHY 12

Human Geography will look at demographic patterns and the factors that influence changes to global and local demography. Relationships between cultures, physical space, and the environment will be compared and contrasted by region and time period to see what trends have developed and the forces that have caused those changes. Agriculture, economies, urbanization, and political organization will all be addressed according to their spatial relationships and their impact on humans. Historical changes and the forces driving modern day decisions and implications for the future, round out the course of study.

POLITICAL STUDIES 12

This course will focus on major political systems here and abroad including First Peoples' governance. Students will look at different electoral systems, the relationships created between people and governments, and international systems that attempt to control global issues. Local, regional, and national politics in Canada will be looked at, as well as issues arising from things like regional disparity and the role of mass media in the democratic process. Students will assess the impact of political data and propaganda, what factors influence political decision making, and critically analyze past and present political decisions that had unintended consequences.

GLOBAL AND INTERCULTURAL STUDIES 12

In this course, we'll be exploring the concept of culture and how it shapes our thinking, behaviour, family lives, and relationships. We'll also explore cultures around the world, current events (international and local), and writing, art, and film from many cultures. We will learn together through



dialogue, discussion, and projects. The goal of this class is to help students become more able to live in and understand a globalised world, to resist stereotypical thinking, and to recognise and challenge imbalances of power and inequity. This class is a great fit for students who hope to spend time travelling, studying, or living abroad. It's also a great course for students who enjoy dialogue and discussion, asking big questions, and engaging with the changing world they live in. The world is changing quickly and post-secondary schools and employers value a global perspective.

Senior Courses Offered for 2022-2023

COMPARATIVE WORLD RELIGIONS 12

Comparative world religions begins by looking at the basis and origins of religion, mythology and spirituality in a variety of contexts and locations throughout history, including the growth and decline in popularity over the centuries. Specific world and First Peoples belief systems will be studied, including institutional and social structures, sacred texts and traditions, and how religion is expressed in daily life through things like art and architecture. Students will examine at how artifacts have influenced culture and assess the representation of religion through mass media.

PHYSICAL GEOGRAPHY 12

Students understand the topics of resources and resource management through studying people's interaction with an ever-changing environment. Humans affect their world through agricultural systems, biotechnology, mining and forestry and are in turn impacted by those environments through environmental degradation and natural disasters. The physical processes that affect the earth form the basis of students' understanding. Topics include plate tectonics, volcanism, earthquakes, landscapes of the world, climate, weather, map skills, vegetation, and soils. Students will make ethical judgements of actions that have impacted our environment in the past, interpret historical and modern-day evidence on topics like climate change, and analyze the human-environment interaction that has been occurring for millions of years.

URBAN STUDIES 12

Students will look at how cities have impacted human life since urbanization began thousands of years ago. The dynamics of how cities have impacted human development and how the development of cities has changed how humans have developed is important. The course will also cover how local and regional governments impact the development of cities, and what urban planning looks like and what it could look like in the future. Contemporary issues around urban development will also be examined, both locally and globally.

MATHEMATICS

Students can meet the Mathematics graduation requirements through any of the pathways described below. All pathways are designed to provide students with mathematical understanding and critical thinking skills. It is the choice of topics through which those skills are developed that varies among the pathways.

Make sure the pathway you've selected satisfies any Post-Secondary entrance requirements for that specific program.

Workplace Mathematics Pathway (Grades 10-11)

This pathway is designed to provide students with the Mathematical understanding and critical thinking skills identified for entry into the majority of trades and for direct entry into the work force. Topics include conversions, measurement, trigonometry, and financial literacy.



Pre-Calculus Mathematics Pathway (Grades 10-12)

This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus. Topics include algebra and number, measurement, relations and functions, trigonometry, and financial literacy.

Foundations Mathematics Pathway (Grades 11-12)

This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into post-secondary programs in the arts or the humanities. Topics include algebra and number, measurement, relations and functions, trigonometry, logic and reasoning, and financial literacy. This pathway **will not** prepare students for university calculus.

The redesigned curriculum focuses on curricular competencies which include: *Understanding and Solving*, *Reasoning and Analyzing*, *Communicating and Representing*, and *Connecting and Reflecting*.

Students will be required to write a numeracy assessment before graduation. This will take place during their Grade 10 year.

MATHEMATICS 8

This is the first course in secondary school Mathematics and builds upon the skills developed in previous grades. Topics include ratios/rates & proportional reasoning, percents, rational number operations, surface area & volume, algebra, the Pythagorean theorem, data & probability, linear relations, and financial literacy. This course aims to provide students with the opportunity to develop the knowledge, skills, and attitudes necessary to be numerate.

Teachers will provide enrichment activities during class time to any interested students. Students seeking enrichment opportunities outside of the classroom can participate in the many math contests that our school will host. There will not be a separate enrichment designation on the report card for this course.

MATHEMATICS 9

This course is designed to extend on topics from Mathematics 8. Topics include: operations with rational numbers, exponents/exponent laws with whole-number exponents, operations with polynomials of degree less than or equal to 2, two-variable linear relations (graphing, interpolation, extrapolation, solving multi-step one-variable linear equations, spatial proportional reasoning, statistics in society, and financial literacy (simple budgets & transactions). At the end of this course, students will be prepared for Foundations and Pre-Calculus 10 OR Workplace 10.

Teachers will provide enrichment activities during class time to any interested students. Students seeking enrichment opportunities outside of the classroom can participate in the many math contests that our school will host. There will not be a separate enrichment designation on the report card for this course.

FOUNDATIONS OF MATHEMATICS & PRE-CALCULUS 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: prime factorization, functions and relations (connecting data, graphs, situations), linear functions (slope & equations of lines), arithmetic sequences/series, systems of linear equations, multiplication of polynomial expressions, polynomial factoring, primary trigonometric ratios, and financial literacy (gross/net pay). Students who have successfully completed the course may register for Foundations of Mathematics 11, Pre-Calculus 11, or Workplace 11. Students will write a Provincial Numeracy Assessment in their Grade 10 year as part of their graduation requirement.



Teachers will provide enrichment activities during class time to any interested students. Students seeking enrichment opportunities outside of the classroom can participate in the many math contests that our school will host. There will not be a separate enrichment designation on the report card for this course.

WORKPLACE MATHEMATICS 10

This course is designed to provide students with the Mathematical understanding and critical thinking skills identified for entry into the majority of trades and for direct entry into the work force. Topics include: primary trigonometric ratios, metric/imperial measurement & conversions, surface area & volume, central tendency, experimental probability, and financial literacy (gross, net pay, deductions).

At the end of this course, students are prepared for Workplace Mathematics 11. Students will write a Provincial Numeracy Assessment in their Grade 10 year as part of their graduation requirement.

PRE-CALCULUS MATHEMATICS 11

This course is designed for students who are going into programs which require theoretical calculus in university (ie. Sciences, Engineering, Computer Science, Human Kinetics or Business). This course is accepted for entrance to most post-secondary institutions. This course explores the real number system, powers with rational exponents, radical operations & equations, polynomial factoring, rational expressions & equations, quadratic functions & equations, linear & quadratic inequalities, trigonometry and financial literacy. The in depth nature of the course is intended to prepare students for Calculus. This course will lead to Pre-Calculus Mathematics 12. Pre-Calculus 11 completes the graduation requirements for Mathematics.

FOUNDATIONS OF MATHEMATICS 11

This course is designed to provide students with mathematical understandings and critical thinking skills identified for post-secondary studies in the arts or fine arts. Topics include logic and reasoning, angle relationships, graphical analysis (linear inequalities, quadratic functions, systems of equations, optimization), applications of statistics, scale models and financial literacy. Although the course explores many abstract concepts including algebra, it will *not* prepare students for university calculus. Students who successfully master the learning outcomes of this course may continue on to Foundations of Mathematics 12. Foundations of Mathematics 11 completes the graduation requirements for Mathematics.

WORKPLACE MATHEMATICS 11

This course is specifically designed to provide students with the mathematical understandings and critical-thinking skills identified for a career in the trades industries, or for direct entry into the work force. Topics include rate of change, probability and statistics in different contexts, interpreting graphs in society, 3D objects (angles, views, and scale diagrams) and financial literacy topics (personal investments, loans, and budgeting). This course will prepare students to take Apprenticeship and Workplace Math 12 if they wish. Workplace Mathematics 11 completes the graduation requirements for Mathematics.

HISTORY OF MATHEMATICS 11

This course is a senior level elective math course geared toward students who 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.

FOUNDATIONS OF MATHEMATICS 12

This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in the arts or fine arts. Topics in this course include: geometric explorations (constructions, conics, fractals), graphical representations of functions (polynomial, logarithmic, exponential, sinusoidal), regression analysis, combinatorics, odds/probability & expected value, and financial literacy (personal financial portfolio, mortgages, exploring banking options and



financial markets). There is increased emphasis on concrete activities and modelling, and decreased emphasis on symbol manipulation (algebra). The Foundations pathway begins in grade 10.

WORKPLACE MATHEMATICS 12

This course is specifically designed to provide students with the mathematical understandings and critical-thinking skills identified for a career in the trades industries, or for direct entry into the work force. Topics include: measurement (tools with graduated scales, metric/imperial conversions, similar triangles (including right-angle trigonometry), 2D and 3D shapes (including area, surface area, volume, and nets), 3D objects and their views (isometric drawing, orthographic projection), mathematics in the workplace, and financial literacy (business investments and loans). The Workplace pathway begins in grade 10.

PRE-CALCULUS 12

This course is designed for students who are going into programs which require theoretical calculus in university (ie. Sciences, Engineering, Computer Science, Human Kinetics or Business). Students will build on concepts learned in Pre-Calculus 11, and will spend more time developing their knowledge of algebra and the more formal generalizations of mathematical concepts. Topics include composite functions, transformations of graphs, exponential and logarithmic functions, polynomial factoring and functions, conic sections, geometric sequences & series, radical & rational functions, and trigonometry (equations, functions & identities).

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.

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. The pre-requisites for this course are Pre-Calculus 11 and 12.

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 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.

AP Statistics 12 is open to Grade 11 and 12 students. Students will learn to examine raw data, graphs, charts, rates, percentages, probabilities, averages, forecasts, and trend lines to see if a true experiment was conducted. The AP exam is written in May for potential first-year university credit.



SCIENCE

SCIENCE 8

Science 8 focuses on cells, kinetic molecular theory, energy transfer and plate tectonics. Students complete a variety of inquiry-based activities and work to connect their learning to real world applications.

DISCOVERY SCIENCE 8/9 – ACCELERATED

Admission to Alpha's Discovery program is based on a recommendation from the student's elementary teacher. The course is an accelerated delivery of both Science 8 and 9 curriculum. This course is designed for students who are interested in and capable of pursuing a more challenging course load at an accelerated pace.

SCIENCE 9

Science 9 focuses on cell growth and reproduction, electron arrangement of the atom, current and static electricity, and energy flow in ecosystems. Students complete a variety of inquiry-based activities and work to connect their learning to real world applications.

SCIENCE ENRICHMENT 8, 9, 10

Students in Science Enrichment are integrated with the regular class. The students complete the same curriculum but with added independent research topics completed through further scientific study. Students are generally expected to complete four major projects: a novel study, a place-based activity, a community project and a skill/ inquiry experiment. Students will consult with their teacher and discuss an individual plan to enrich their own learning. After successful completion of the criteria, students may be eligible to receive an Enriched designation on their report cards. Success in Science Enrichment means completing requirements independently, meeting deadlines, and checking in regularly with their teacher.

SCIENCE 10

Science 10 has four major units: Genetics, Chemical Processes, Energy Transfer and the Big Bang Theory. Students complete a variety of inquiry-based activities and work to connect their learning to real world applications.

EARTH SCIENCE 11

Earth Science 11 examines many of the characteristics, processes, distributions, and interactions among the physical components of the Earth's surface. These physical components are considered not only for their own importance, but also for the influences they exert on peoples' activities – the way the physical environment is used, misused and altered by humans. This course investigates 5 big ideas (1) Earth's materials are changed as they cycle through the geosphere and are used as resources, with economic and environmental implications (2) Plate tectonic theory explains the consequences of tectonic plate interactions (3) The transfer of energy through the atmosphere creates weather, and this transfer is affected by climate change (4) The distribution of water has a major influence on weather and climate (5) Astronomy seeks to explain the origin and interactions of Earth and its solar system.

LIFE SCIENCES 11

Biology 11 is designed to introduce students to the diverse adaptations and ecological relationships in a variety of living organisms. This course covers microbiology, mycology (fungus), plant biology, animal biology and ecology with themes of evolutionary change throughout the course.

LIFE SCIENCES 11 HONOURS and AP BIOLOGY 12 (*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 Biology 11 and 12 as well as additional material for Advanced Placement. The AP Biology course is designed to be the equivalent of a college introductory biology course and is



open to any students who are prepared to do extensive inquiry-based research and labs. More than 25% of the course is practical laboratory work. *Upon completion, students will receive a total of 12 credits. The AP Biology exam is written in May.*

CHEMISTRY 11

Chemistry 11 includes the study atoms, molecules, chemical reactions, solution chemistry and organic chemistry. These concepts are reinforced through laboratory work.

CHEMISTRY 11 HONOURS and AP CHEMISTRY 12 (*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 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

Welcome to the world of Galileo, Isaac Newton and Albert Einstein! These giants of physics teach us how to see the invisible forces and energies that govern movement of cars and spaceships alike. This course includes the study of motion, forces, momentum and energy, the properties of mirrors, lenses, waves and light, nuclear power and Einstein's special theory of relativity. As part of course requirements, students will contribute by making connections to real physical situations, and inquiry lab experiences.

PHYSICS 11 Honours and AP PHYSICS 12 (*students must choose both*)

This program is designed to cover both semesters so students must request both courses. Are you up for the challenge of a first-semester college/university level course that is mathematically rigorous, requiring problem-solving at a Physics 12 level? This college/university course preparation is faster-paced than Physics 11 and individual study of 1 to 2 hours daily will be necessary to successfully complete the requirements. Upon course completion students get physics 11, 12 and AP Physics 1 credits. Students will be accepted on the recommendation of their teachers, and an application process. The course is also suitable for grade 12's who only need one physics course.

ANATOMY & PHYSIOLOGY 12

Biology 12 encompasses two major topics of study: Cellular Biology: cell structure/function, biological molecules DNA, protein synthesis and enzymes; and Human Anatomy and Physiology: digestive, circulatory, respiratory, nervous, endocrine, excretory and reproductive systems.

CHEMISTRY 12

Chemistry 12 builds on concepts covered in Chemistry 11 and emphasizes the interaction of atoms, molecules, and ions. The course covers the study of reaction kinetics, chemical equilibrium, and oxidation-reduction. The concepts are reinforced through laboratory work. Through this investigation, students will gain an increased understanding of the importance of chemistry in the modern world.

PHYSICS 12

Physics 12 is an enrichment of physics 11 course with the addition of the study of classical mechanics in 2D such as projectile motion, forces in 2D, circular motion, torque, as well as units such as static electricity, current electricity, and electromagnetism. Are you up for a challenge? Problem-solving is mathematically much more rigorous than in Physics 11 and takes much more time every night to get the same good grades.



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 Biology 11 is recommended.

LANGUAGES

FRENCH 8

This course builds upon the background students have acquired at elementary school. Basic vocabulary and grammar structures are reviewed and reinforced 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. They will be expected to participate in short conversations, give presentations and exchange information about their interests and activities. Language is taught within the context of age appropriate themes, with a large emphasis on listening and speaking.

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, listen to French audio scripts, read various texts and express themselves in the written language. Communication is centered on age-appropriate themes. Students will discover aspects of Francophone culture around the world.

FRENCH 10

This course reviews and builds upon the French 9 program. By the end of this course, students will have increased confidence in understanding and communicating in French. Grammar and vocabulary are taught within the context of engaging themes, allowing for individual expression, through a variety of written and performance-based tasks. Students will also explore Francophone culture around the world.

INTRODUCTORY FRENCH 11

Introductory French 11 offers an opportunity for students who did not begin Core French in the elementary grades to enter Core French at the secondary level. Core French Introductory 11 is an intensive course, designed to cover essential curricular competencies from Grades 5 to 10 in an accelerated time frame in order to prepare students for Core French 11. It is assumed that students would have limited to no background in Core French prior to enrolment. Enrolment in Core French Introductory 11 is not limited to Grade 11 students.

FRENCH 11

This course reviews and builds upon the French 10 program, with an emphasis on written communication and reading comprehension. By the end of this course, students will be able to use French 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 continue to explore Francophone culture around the world. This course satisfies university entrance requirements.

FRENCH 12

This course will provide increased opportunity to develop all four skills in listening, speaking, reading and writing. Grammar and vocabulary are taught within motivating themes that promote critical thinking and creative expression. 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. This course has an optional provincial exam.



ITALIAN 9

Students learn the basics of the Italian language. With an emphasis on conversation, students also learn to read, write and understand Italian. They are also exposed to Italian culture and tradition through different types of media; such as internet, music, films and art.

ITALIAN 10

Students expand their knowledge of the Italian language through written and oral comprehension activities that will broaden their ability to communicate in Italian and increase their appreciation of the Italian culture.

INTRODUCTORY ITALIAN 11

This is a fast-paced course encompassing Italian 9 and 10. It will give students a basic knowledge of Italian while introducing them to Italian customs and traditions.

ITALIAN 11

Students expand their knowledge of Italian further. They explore the immigration of Italians to Canada and to other countries. Students discover current trends and events in Italy and attain a more sophisticated appreciation of the Italian language and culture.

ITALIAN 12

This course provides an in depth look at the Italian language emphasizing communication and examining culture through authentic materials and more sophisticated real life situations.

MANDARIN 9

This is an introductory course of Mandarin Chinese, designed for students who are beginning learners of the language. The core skills of reading, writing, listening, speaking, and interacting in Mandarin Chinese will be developed, with a focus on communication in real-life, practical contexts. Simplified/Traditional characters and the phonetic system Hanyu Pinyin will be used. In addition, students will explore and experience Chinese culture through films, music, games, stories, and hands-on projects. Topics may include greetings, family, world, jobs, and school. By the end of this course, students will be able to write and converse in clear sentences.

MANDARIN 10

Students with some knowledge of Simplified or Traditional Chinese characters and Hanyu Pinyin will feel comfortable at this level. Reading, writing, listening, speaking, and interacting skills in Mandarin Chinese will be developed, as well as an appreciation of Chinese culture through films, music, games, stories, and hands-on projects. Topics may include clothing, weather, vacation, hobbies, and school. By the end of this course, students will be able to put together sentences to form paragraphs, orally and in writing.

INTRODUCTORY MANDARIN 11

This is a course designed for students in Grade 11 or 12 who have zero knowledge of Simplified Chinese characters. It is an intensive course that requires students to develop skills in listening, speaking, reading, and writing. Students will explore Chinese culture through films, music, games, stories that cover topics like greetings, family, world, job, school, clothing, weather, vacation, hobbies, etc.

MANDARIN 11

Students who have successfully completed Mandarin 10 or had formal schooling in a Chinese environment in their early years will be appropriate for this level. Students will gain a deeper understanding of Chinese culture, as well as see the growth of their reading, writing, listening, speaking, and interacting skills in Mandarin Chinese. Topics may include food, health, shopping, and residence. Activities range from hands-



on projects to discussions. By the end of this course, students will be able to write and converse in short paragraphs.

MANDARIN 12

Students who have successfully completed Mandarin 11 or had recent formal schooling in a Chinese environment should register in this course. Reading, writing, listening, speaking, and interacting skills in Mandarin Chinese will be honed. Activities include discussions, presentations, and film screening. Topics may include customs and traditions, travel, familial values, and community. By the end of this course, students will be able to express ideas with oral and written Mandarin.

SPANISH 9

This course is an introduction to the Spanish language. Emphasis is on listening, speaking, reading and writing. 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, read various texts and express themselves in the written language. Communication is centered on age-appropriate themes. Students will discover aspects of the Spanish-speaking world and its culture.

SPANISH 10

This course builds upon the knowledge, skills and language learning strategies acquired in Spanish 9. There is an increased emphasis on listening, speaking, reading and writing. By the end of this course, students will have greater confidence in understanding and communicating in Spanish. Grammar and vocabulary are taught within the context of engaging themes, allowing for individual expression, through a variety of written and performance-based tasks. Students will explore the Spanish-speaking world and its culture.

INTRODUCTORY SPANISH 11

This course is open to students looking for a challenging introductory language course; curriculum is presented at an accelerated pace. Language and culture is explored through engaging themes aimed at meeting the needs of all learners. Learning outcomes are taught within the context of real-life situations, allowing for individual expression through a variety of written and performance-based tasks. This course satisfies some university entrance requirements and is a prerequisite for Spanish 11.

SPANISH 11

This course provides further development in listening, speaking, reading and writing. It builds upon the knowledge, skills and language learning strategies acquired in Spanish 10 or Intro. Spanish 11. By the end of this course, 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. This course satisfies university entrance requirements.

SPANISH 12

This course will provide increased opportunity to develop all four skills in listening, speaking, reading and writing. Grammar and vocabulary are taught within motivating themes that promote critical thinking and creative expression. Instruction will often be in Spanish, and students will be encouraged to use Spanish as the routine language of communication. Students will examine Spanish-speaking culture around the world. This course has an optional provincial exam.

The following languages are also offered: Japanese, Croatian, Korean and Punjabi.



PHYSICAL & HEALTH EDUCATION

PHYSICAL & HEALTH EDUCATION 8

This course will introduce students to a wide variety of sporting, recreational, and fitness activities enabling them to further develop their physical literacy (ex, fundamental movement skills) and contribute to their physical growth and development. Students will also participate in alternate environment activities to build their understanding and appreciation for the components of active living such as skating and a year-end trip to Cultus Lake Waterpark. In addition, students will be introduced to health units that promote healthy eating choices. Also, lessons about anatomy of bones and muscles and explore mental health issues such as stigma or realities of mental health. These educational experiences will allow each student to learn and understand the importance of fundamental movement skills that may transfer to different activities, concepts of being healthy and the importance of mental health.

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 the nutrition unit. Also, students will have discussions about treatments or recovery of mental health issues and how positive mental health could benefit their mental well-being. In addition, students are provided opportunities to participate in alternate activities which may include skating, bowling, traditional Kung-Fu and self defense. This course will continue to build on transfer of fundamental movement skills to activities done in PHE and further enhance the understanding of being healthy and the importance of mental health.



PHYSICAL & HEALTH EDUCATION 10

The Physical & Health Education 10 course builds upon PHE 9, enabling students to explore many alternate activities, yet still developing their physical literacy (ex, fundamental movement skills). PHE 10 continues its extension of health components and puts an emphasis on specific mental illnesses. In addition, students will have discussions about making healthy living choices through active health units. In this course, they will be given the opportunity to explore activities such as skating, golf, hip-hop dance classes and a CPR/First Aid certification course lead by Burnaby Firefighters. Students will to explore, learn and understand the concepts of physical and health literacy and emphasize the importance of self-awareness and mental health.

ACTIVE LIVING 11

This course progresses from the 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. This course is a good choice for those who enjoy ACTIVELY participating in individual or team sports, recreational and/or competitive activities. Field trips in this course could include bubble soccer, bowling, laser tagging, kayaking, and indoor/beach archery. 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 low organized activities/games with elementary students. This course emphasizes healthy lifestyles and teaches students to stay active after they graduate from Alpha Secondary.

ACTIVE LIVING 11 – KEEP FIT

This course includes fitness and lifelong recreational activities and explores health related topics of specific interest to students in grade 11. This course aims to teach students the tools necessary to develop and maintain a healthy lifestyle into their adult years. The course approaches health and wellness from a holistic perspective exploring not only the physical aspect of health, but the mental and emotional areas as well. Students will participate in a wide variety of activities including weight-training, Pilates, yoga, Zumba, kayaking, hiking and more. This course focuses on being healthy and having fun.



FITNESS AND CONDITIONING 11 (SEMESTER)

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.

FITNESS AND CONDITIONING 11 (AM – LINEAR)

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.

OUTDOOR EDUCATION 11

This course involves participation in outdoor activities and explores outdoor safety and emergency preparedness. Students will explore environmental stewardship for outdoor activities and learn about the responsible use of outdoor environments. Students will participate in water-based, snow-based and land-based activities in varied terrain and changing weather conditions. These activities may include stand-up paddle boarding, kayaking, rock climbing, hiking, snow shoeing, skiing and camping. In addition, students will explore First Peoples traditional practices and ecological knowledge related to activities in the local environment. Important Note: Students will be expected to travel in groups to locations outside of school and may be dismissed at 3pm from these locations.

ACTIVE LIVING 12

This course progresses from the 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. This course is a good choice for those who enjoy ACTIVELY participating in individual or team sports, recreational and/or competitive activities. Field trips in this course could include bubble soccer, bowling, laser tagging, kayaking, and indoor/beach archery. 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 low organized activities/games with elementary students. This course emphasizes healthy lifestyles and teaches students to stay active after they graduate from Alpha Secondary.

ACTIVE LIVING 12 – KEEP FIT

This course includes fitness and lifelong recreational activities, and explores health related topics of specific interest to students in grade 11. This course aims to teach students the tools necessary to develop and maintain a healthy lifestyle into their adult years. The course approaches health and wellness from a holistic perspective exploring not only the physical aspect of health, but the mental and emotional areas as well. Students will participate in a wide variety of activities including weight-training, Pilates, yoga, Zumba, kayaking, hiking and more. This course focuses on being healthy and having fun.



FITNESS AND CONDITIONING 12 (SEMESTER)

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.

FITNESS AND CONDITIONING 12 (AM – LINEAR)

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.

OUTDOOR EDUCATION 12

This course involves participation in outdoor activities and explores outdoor safety and emergency preparedness. Students will explore environmental stewardship for outdoor activities and learn about the responsible use of outdoor environments. Students will participate in water-based, snow-based and land-based activities in varied terrain and changing weather conditions. These activities may include stand-up paddle boarding, kayaking, rock climbing, hiking, snow shoeing, skiing and camping. In addition, students will explore First Peoples traditional practices and ecological knowledge related to activities in the local environment. Important Note: Students will be expected to travel in groups to locations outside of school and may be dismissed at 3pm from these locations.

VISUAL & PERFORMING ARTS

Dance Courses

DANCE 8

Dancers of all backgrounds and levels of experience are welcome in Dance 8! Students work collaboratively to explore dance elements and create choreography in a number of dance styles. Dancers will develop their dance technique, dance vocabulary as well as learn and perform choreography in many dance styles in a safe and accepting learning environment. Students will have multiple performance opportunities and will practice self and peer-assessment throughout the course which will contribute to their final mark. This course allows students to immerse themselves in the world of dance in a low-risk, high-energy environment.

DANCE PERFORMANCE 9 - 12

Dancers of all backgrounds and levels of experience are welcome in Dance 9 - 12! This course is an exploration of a multitude of dance styles, including street jazz, hip-hop, contemporary, musical theatre and much more. Dancers will develop their dance technique, dance vocabulary as well as learn and perform choreography in many dance styles in a safe and accepting learning environment. Students will have a chance to learn choreography but also to create and perform their own original choreography. There are many performance opportunities, such as flash mobs and the evening performance which occurs closer to the end of the semester. A large part of this course is self-assessment and practicing self-reflection as a dancer. Whether you have been dancing your whole life or just wanting to start now - this is the course for you!



DANCE COMPANY 9-12

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. In this course, dancers will encounter several dance styles and learn choreography that they will perform at special school and community events as representatives of our Dance program. It is strongly recommended that members of the Dance Company also participate in the in-schedule Dance Performance 9-12 or Choreography 11/12 courses. If you want a challenging and rewarding dance experience beyond the typical Dance 9-12 class, this is the course for you!

Note: If you are in grade nine, Dance Company is an EXTRA course, meaning that you still need to take 8 in-schedule courses. Taking Dance Company does not mean you have a spare block during your regular school schedule.

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. This course collaborates with the Dance 9-12 class to build solo and group choreography creation skills across a number of dance styles. The choreography students will serve as leaders to create dynamic and exciting dance pieces that will be performed in the regular dance shows and other settings. In this course, students will have the opportunity to really learn what it takes to be a choreographer and explore skills like dance terminology, elements of dance and how to provide constructive feedback for fellow dancers.

Music

MUSIC 8: BEGINNER BAND

This course is an introduction course in which students are introduced to the technique, rudiments, and maintenance 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, reflections, and performance. All Grade 8 band classes are a part of the junior band. Students will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations. Students should choose Beginner 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 will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations.

MUSIC 9/10: 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 and 10s make up the intermediate band, which provides leadership opportunities for more experienced players. Students will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations.

MUSIC 11/12: CONCERT BAND (*Offered outside the timetable*)

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 will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations.



MUSIC 9/10: JAZZ BAND (*Offered outside the timetable*)

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 grade 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 will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations. Please see the band teacher if you are interested in this course. This is an auditioned ensemble.

MUSIC 11/12: JAZZ BAND (*Offered outside the timetable*)

Students continue developing improvisational skills, exploring jazz styles, and providing leadership within this advanced ensemble. Students in grade 11 and 12 make up the Senior Jazz band. Instruments are: trumpet, trombone, saxophone (alto, tenor, bari) and rhythm section (piano, bass, drums, and guitar). Students will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations. Please see the band teacher if you are interested in this course. This is an auditioned ensemble

MUSIC 8/9/10/11/12: CONCERT CHOIR (*Offered outside the timetable*)

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 will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations. No previous experience necessary.

MUSIC 8/9/10/11/12: CHAMBER CHOIR (*Offered outside the timetable*)

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. As with Concert Choir, students will be required to attend any and all scheduled extra-curricular rehearsals and performances as part of the course expectations. Please contact the choir teacher if you are interested in this course. This is an auditioned ensemble.

MUSIC 9/10/11/12: GUITAR (*Acoustic*)

Students will learn basic chord patterns in folk, pop and rock styles, rudimentary music theory, note-reading, tablature, rhythmic skills, basic finger-picking patterns, various left-hand techniques, and some forms of melodic/harmonic styles of guitar playing. The emphasis in the course is on ensemble playing, though there will be opportunities to prepare individual pieces. Guitars will not be provided for classroom use. No previous musical experience is necessary.

MUSIC 11/12: COMPOSITION & TECHNOLOGY

This course is a unique music composition class at Alpha, with a focus on traditional methods of composition, as well as the use of technology. This course is intended for students who have a background in the music program or have taken private music lessons outside of school. Students will learn to explore and arrange sound to form compositions for both live instruments and computer-generated sounds. Programs in the music lab include Cubase, Sibelius, and Band in a Box, used with synthesizer workstations. Students will also learn to create recordings of their performances and compositions. Music written by students will be performed for the class or in the program's Fall and Spring concerts. Students who enjoy a challenge, a sense of accomplishment, and are self-motivated will find this course fun and rewarding.



Drama Courses



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 basic 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 also 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, to communicate an understanding of these experiences, and to 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, and how to prepare for 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 (*PM Class*)

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.

*Please note that this course is a LINEAR class offered until June, and that it consists of a combination of multiple grade levels. During the pandemic, students will be working on the same material, and meeting 2-3 times per week, in keeping with Health and Safety protocols.

Visual Arts



ARTS EDUCATION 8

An introductory course for students to explore a variety of materials in 2-D and 3-D image making, develop basic drawing skills and study the work of selected artists.

ARTS EDUCATION 9

This course provides opportunity for exploration of a variety of materials, processes and techniques in 2-dimensional and 3-dimensional artwork, while studying selected artists who have worked in these areas. Emphasis will be placed on the development of personal imagery and gaining a basic understanding of the elements and principles of design. A sketchbook is recommended. All students are welcome to take this course; no prerequisites are necessary.

ARTS EDUCATION 10

This course provides opportunity for exploration of a variety of materials, processes and techniques in 2-dimensional and 3-dimensional artwork, while studying selected artists who have worked in these areas. Emphasis will be placed on the development of personal imagery and gaining a basic understanding of the elements and principles of design. A sketchbook is recommended. All students are welcome to take this course; no prerequisites are necessary.

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 prerequisite. A sketchbook is required. All Grade 10 - 12 students are welcome to take this course; no prerequisites are necessary.

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. All grade 10 – 12 students are welcome to take this course; no prerequisites are necessary.

VISUAL ARTS 10/STUDIO ARTS 11/12: GRAPHIC ARTS

This course is designed for students who wish to learn about Graphic Design using professional grade Adobe software such as Illustrator, InDesign, and Photoshop. Students will learn the elements and principles of design and typography while completing a wide range of projects such as digital drawings, logos, advertisements, brochures, book covers and more. Students will be encouraged to create their own artwork and photos for many of the assignments. It is highly recommended that students planning to take AP 2-D Studio Art 12 take this course. All grade 10-12 students are welcome to take this course; no prerequisites are necessary.

PHOTOGRAPHY 11

This course is an introduction to photography and includes both technical and creative components. Students will study historical developments and apply the elements and principles of design in photographic production and critiques. Taking photographs using cell phones and digital DSLR cameras as well as discover the uses of a variety of lenses and filters will be explored. There will be opportunities to enhance



and alter images using a variety of software such as Adobe Photoshop and Lightroom. Regular in-class field trips are required. All senior students are welcome to take this course; no prerequisites are necessary.

PHOTOGRAPHY 12

This course builds on skills learned in Photography 11. Students will study historical developments in photography and apply the elements and principles of design in photographic production and critiques. They will further their understanding of the DSLR camera, lenses and filters, and develop a portfolio of personal work and explore career options. There will be opportunities to enhance and alter images using a variety of software such as Adobe Photoshop and Lightroom. Regular in-class field trips are required. All senior students are welcome to take this course; no prerequisites are necessary.

YEARBOOK 11/12

Teamwork and responsibility are a must in this course. Each student must be prepared to dedicate more than just class time to the production of this historical document. In return, this course offers students valuable work skills and training in desktop publishing and design. Students will use Photoshop and InDesign, and learn about journalism, photography, photo editing, layouts, typography and colour theory. Highly motivated and organized students will have the opportunity to take on various leadership roles on the Yearbook Executive, including Co-Editor, Photo Archivist, Events Coordinator and Sales Manager. Because of the demands of meeting publishing deadlines, both attendance and punctuality are a must.

CAREER PREPARATION PROGRAMS

CAREER LIFE EDUCATION 10 (4 Credits)

CLE 10 is a 4-credit course that is required for graduation. It is designed to help students develop the skills they need to establish goals, make meaningful decisions and think critically about their life post-graduation. Throughout the course students will develop skills and explore the following areas: post-graduation planning, goal setting, career development, maintaining and developing positive relationships, financial planning, global market trends, volunteerism and their own personal passions.

CAREER LIFE CONNECTIONS 11 (2 Credits)

CLC 11 is a course that is required for graduation and is delivered during scheduled collaboration time and through Office365 online. CLC 11 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 they live in. 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 attend 3 sessions *during collab time* and complete all assignments.

CAREER PREPARATION 11

Grade 11 students interested in taking the elective course Work Experience 12A the following year will select a Career Preparation (CP) focus area for grade 11, i.e. “CP Business & Applied Business.” Students can begin work experience in grade 11 to then complete in Grade 12.

CAREER LIFE CONNECTIONS 12 – CAPSTONE (2 Credits)

CLC 12 is completed through students doing a yearlong Capstone Project. A capstone is a culminating project that encourages students to explore their passions and specific SMART goals for the future. Ideally, the capstone project will be meaningful, relevant and useful in the transition beyond school. Throughout the year students will complete a proposal, several check ins with Capstone teachers and other supporting documents to ensure they are on track to successfully complete the course. Students will design, assemble, reflect and celebrate a capstone to an audience to demonstrate personal learning and achievement.



Special Note: Once the student has completed both courses, they will receive the total 4 credits needed to meet the graduation requirements.

WORK EXPERIENCE – 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 their specific area they wish to explore. This program does not include paid work and students can complete it over school breaks and during the school year.

Work Experience Graduation Requirements

In order to meet graduation requirements students must complete a minimum of 30 hours of work experience in their grade 12 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 Repair Tech	VCC	28
Auto Refinishing and Prep Tech	VCC	20
Auto Service Technician	Cariboo Hill (Day 1)	20
Baker (Pastry Arts)	VCC (downtown campus)	24
Carpenter	Cariboo Hill (Day 1)	20
Construction Electrician	Burnaby Mountain (Day 1)	20
Hairstylist (2-year program)	Alpha (Day 1)	40
Metal Fabricator	BCIT	20
Painter and Decorator	Finishing Trades Institute	4
Pipefitter	Piping Industry College of BC on Annacis Island	4
Plumber	Piping Industry College of BC on Annacis Island	4
Professional Cook	Burnaby Central (M-T afternoons)	28

Industry Connect

Burnaby schools offers 5 unique Industry Connect programs that prepares students for postsecondary programs and entry level work. Student 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
Film and Broadcast	Burnaby North (Day 1 PM)	16
Graphics/Media Arts	Byrne Creek (3 afternoons per week)	16
Health Sciences	Moscrop (3 afternoons per week)	16
Music Production & Technology	Burnaby North (Day 1 PM)	16
Robotics (Mechatronics)	Alpha (Day 1 afternoon)	16



Industry Certification

Burnaby schools offers 6 unique programs that provide students the opportunity to earn graduation credits, post-secondary credits and industry certification. These programs prepare students with hands on skills and entry level industry training. Some of these programs include 120 hours of work experience.

Program	Location	Credits
CISCO Networking Academy	Burnaby South (Day 1)	20
DigiPen Gaming Academy	Cariboo Hill (enrolled students)	TBA
Fitness Instructor	Burnaby South (every AM)	20
Tourism & Event Management	Burnaby Mountain (3 afternoons per week)	16
Microsoft Office Specialist	Cariboo Hill	TBA
Palo Alto Cyber Security	Cariboo Hill	TBA

INDUSTRY TRAINING PROGRAMS (ACE IT)

What Is Istep?

iSTEP (interdisciplinary Skills Trades Exploration Program) is a full year program for students in grade 10. The program is exploratory in nature allowing students to determine areas of interest and strength in various trade fields: carpentry electrical, metal fabrication, plumbing, welding, automotive, etc., in order to help them choose their preferred grade 11/12 industry training program.

Youth Training in Trades - Ace It

ACE-IT (Accelerated Credit Enrolment in Industry Training) is an industry program for high school students. Through an ACE-IT program, you can take courses that will give you both high school graduation credits and lead to apprenticeship level one technical training certification.

ACE-IT programs are developed and offered as partnerships between school districts and post-secondary institutions, and classes are often taught at colleges. Local employers also get involved in the development of ACE-IT programs, and students who complete these programs typically have very good success in finding employment.

Once you successfully complete an ACE-IT program you will get credit for at least level one of the technical training (in-class) component of your Industry training Program. Enroll in both ACE-IT and the Secondary School Apprenticeship program and you will be well on your way to completing your first year of post-secondary education by the time you graduate from high school.

Youth Training In Trades Program Options - Ace-It

Program	Location	Total Elective Credits
Auto Collision Repair Tech	VCC	28
Auto Refinishing and Prep Tech	VCC	20
Auto Service Technician	Cariboo Hill	20
Baker	VCC (Downtown Campus)	24
Carpentry Level 1 (Construction)	Cariboo Hill	20
Computer Networking Technician	Burnaby South	20
Construction Electrician	Burnaby Mountain	20
Music & Technology Production	Burnaby North	16
Film and Broadcast	Burnaby North	20
Fitness Leadership Instructor	Burnaby South	20
Graphics/Media Arts	Byrne Creek	16
Hairstylist (2-year program)	Alpha	36
Health Sciences	Moscrop	16
Hotel & Event Management	Burnaby Mountain	16
Metal Fabrication	BCIT	16
Commercial Painter & Decorator	FTI	4
Pipefitter	Squamish Nations Trade Centre	16
Plumbing	Piping Industry(PIAB)	4
Professional Cook Training	Burnaby Central	28
Robotics (Mechatronics)	Alpha	16
CISCO Networking Academy	Burnaby South (Day 1)	20
DigiPen Gaming Academy	Cariboo Hill (enrolled students)	2 per course
Fitness Instructor	Burnaby South (every am)	20
Tourism & Event Management	Burnaby Mountain (3 afternoons/week)	16
Microsoft Office Specialist	Cariboo Hill (enrolled students)	1 per course
Palo Alto Cyber Security	Cariboo Hill (linear students)	4



YOUTH TRAINING IN TRADES PROGRAM (SSA)

The Youth Work in Trades provides Grade 10, 11, and 12 students with a tremendous opportunity to receive a minimum of 480 hours of *possible* paid, on-the-job training while still in school. An apprenticeship involves a formal agreement between a student, the Industry Training Authority (ITA) and an employer/union whereby the student learns current skills and knowledge associated with a trade or occupation under the supervision of a qualified journey person.

DISTRICT PROGRAMS HOSTED AT ALPHA



Burnaby School District Hairdressing Program

The Burnaby school District Youth train and Trades program is a 1-year full time program. It offers the exclusive opportunity for secondary students to earn graduation credits and post-secondary Industry Certification in the professional career of Hairdressing.

Units Of study include:

- Draping, shampooing, scalp massage
- Hair and scalp disorders
- Sanitation and public health
- Haircutting
- Hairstyling
- Hair colouring- application and formulation
- Salon business
- Professionalism
- Job skills – work experience in a salon atmosphere
- Client relations and people skills
- Sciences related to the profession, (anatomy, chemistry,)
- Knowledge of professional product lines
- Support an apprentice pathway into the industry

Requirements

- Grade 11 & 12 student
- Accumulation of 990 classroom hours over the year
- Minimum of 300 work experience hours

Upon completion of this program students will be eligible to continue on to Hair Level 2, continuing to attain the ITA Standardized Red Seal recommendation for certification.



Robotics (Mechatronics)

The Robotics and Automation program offers students who aspire to become programmers, designers and/or engineers the opportunity to participate in a project-based technology program in mechatronics and manufacturing. It enables students to acquire up to 16 graduation credits. This program allows students to continue their focus and studies into a post-secondary institution. As part of the industry training program requirements, students will complete 120 hours of workplace experience in a related setting. This program is suited for students in grades 11 or 12, enrolled in Math, have a knowledge of physics, and exhibit a strong interest in designing and building robots, as well as an aptitude for working with computer hardware, software, and electronics.

Further information for all programs is available online <https://burnabyschools.ca/careereducation/>