

# COURSES 2024-2025

The following has been offered in the past at Queen Elizabeth Continuing Education or is currently being offered. Notes:

- All courses may not be offered every semester
- Courses must have a minimum enrolment to run
- Graduated adults (GA) cannot enroll in all courses
  - o "GA available" will be added to the description of the courses that graduated adults can enroll in

## Departments

## ADST (Applied Design, Skills, and Technologies)

- Accounting 11
- Automotive Technology 11&12
- Business Computer Applications 12
- Culinary Arts 11&12
- Emergency Medical Responder 12, A&B
- Work Experience 12, A&B
- YELL (Entrepreneurship 12)

#### Arts Education

• Art Studio 12

## English Language Arts

- Foundations English, Level 7 (This course is for adults or for high school students as an English 11 prep course.)
- Literary Studies 11 GA available
- English First Peoples 12 GA available
- English Studies 12 GA available

## **Mathematics**

- Foundations Math, Level 7 (This course is for adults or for high school students as a Math 11 prep course.)
- Foundations of Mathematics 11 GA available
- Pre-Calculus 11 GA available
- Workplace Mathematics 11 GA available
- Foundations of Mathematics 12 GA available
- Pre-Calculus 12 GA available
- Calculus 12 GA available

#### Physical and Health Education

• Active Living 12

## **Science**

- Chemistry 11 GA available
- Life Sciences 11 (Biology 11) GA available
- Physics 11 GA available
- Science for Citizens 11 GA available
- Anatomy & Physiology 12 (Biology 12) GA available
- Chemistry 12 GA available
- Physics 12 GA available
- Specialized Science 12 GA available

#### Social Studies

- Explorations of Social Studies 11
- BC First Peoples 12
- Law Studies 12
- Philosophy 12 interdisciplinary studies course with English Studies 12
- Social Justice 12 interdisciplinary studies course with English Studies 12

## <mark>ACCOUNTING 11</mark>

The purpose of this course is to assist students in understanding the role and functions of accounting in business. Students will have the opportunity to learn how to record, analyze, and interpret the economic activities of a business.

Students are expected to know the following:

- the role of accounting in business
- the accounting cycle
- accounting principles
- accounting equation
- relationship between debit and credit entries
- source documents, general journals, ledgers, accounts payable and receivable, and trial balances, and the relationship between them
- special journals
- chart of accounts
- preparation process of financial documents and statements
- financial decision making using financial documents
- coordination and facilitation skills for projects and processes
- interpersonal and presentation skills to promote products or services and to interact with potential customers/clients
- career options and opportunities in various accounting sectors
- industry best practices

The "Big Ideas" of the course include: (i) services and products can be designed through consultation and collaboration; (ii) financial literacy promotes sound and effective business design; (iii) tolls and technologies can be adapted for specific purposes.

• Textbook Deposit: TBD

## <mark>ACTIVE LIVING 12</mark>

Active Living 12 aims to empower students to develop a personalized understanding of what healthy living means to them as individuals and members of society in the 21st century. The Active Living 12 curriculum focuses on well-being—the connections between physical, intellectual, mental, and social health.

- the role of nutrition and how it can affect health and performance
- potential short- and long-term consequences of health decisions
- the benefits of physical activities for health and mental well-being
- physical activity safety and etiquette

- injury prevention and management
- proper physical movement patterns
- ways to monitor and adjust physical exertion levels
- rules and guidelines for different types of sports and activities
- recreational resources available in the community

The "Big Ideas" of the course include: (i) physical activity is an important part of overall health and well-being; (ii) finding enjoyable recreational activities can motivate people to participate more regularly in physical activity; (iii) safety and injury prevention practices allow lifelong participation in physical activities.

• Textbook Deposit: TBD

## ANATOMY and PHYSIOLOGY 12

GA available

Anatomy and Physiology 12 is an academic science course that is weighted towards cell and human biology systems. Having taken Chemistry 11 and Biology 11 will be assets in this course. Topics include cell structures, transport, DNA, protein synthesis, enzymes, human digestive, circulatory, heart, respiratory, nervous, urinary, and reproductive systems.

Students are expected to know the following:

- biological molecules
- metabolism and enzymes
- feedback loops and regulation of the body's internal environment
- transport across a cell membrane
- DNA: the cell's genetic information; replication
- gene expression
- proteins and their relationship to the structure and function of cells
- genomics and biotechnology
- micro to macro-organization
- organ systems: structure and function; structural and functional interdependence; maintenance of homeostasis
- lifestyle differences and the effects on human health
- holistic approach to health
- disease as an imbalance in homeostasis

The "Big Ideas" of the course include: (i) homeostasis is maintained through physiological processes; (ii) gene expression, through protein synthesis, is an interaction between genes and the environment; (iii) organ systems have complex interrelationships to maintain homeostasis

• Textbook Deposit: \$100

## <mark>ART STUDIO 12</mark>

Students will work within a school art studio, with the course being a hands-on curriculum. In Art Studio 12, students explore concepts and methods that extend methods in drawing & painting, sculpture, printmaking, design, collage, and ceramics. The projects challenge students to create authentic images and work toward a personal style of expression. It offers senior students an enjoyable artistic opportunity within the schedule of an academic load. There is also an emphasis on a deeper understanding of the creative process, on art history, on preparing an art portfolio for post-secondary application, and preparing Art for public display.

Students are expected to know the following:

- elements of visual art
- principles of design
- image development strategies
- materials, techniques, and technologies
- creative processes
- symbols and metaphors
- roles of and relationships between artist and audience in a variety of contexts
- influences of visual culture in social and other media
- traditional and contemporary First Peoples worldviews, stories, and history, as expressed through visual arts
- history or a variety of artistic movements, including their roles in historical and contemporary societies
- moral rights and the ethics of cultural appropriation and plagiarism
- health and safety protocols and procedures

The "Big Ideas" that frame this course are: (a) an artist's intention transforms materials into art; (b) visual arts are an essential element f culture and personal identity; (c) refining artistic expression requires perseverance, resilience, and risk taking; (d) purposeful artistic choices enhance the depth and meaning of artistic work; and (e) aesthetic experiences have the power to transform our perspective.

• Materials Fee: TBD

#### **AUTOMOTIVE TECHNOLOGY 11**

This course develops knowledge of automotive mechanics, including hybrid power configuration and modern electronic control systems. Topics include safety, common maintenance procedures, OBD diagnostics, engine and power train, front-end steering, and brakes.

- simple automotive repair and maintenance
- social, legal, and ethical responsibilities associated with vehicle operation
- use of technical information and manuals for the purpose of diagnostics and repair
- fundamental automotive tools and equipment
- lifting equipment and procedures
- chassis and body

- engine diagnostic support systems
- emerging and alternative energy sources used to power automotive vehicles
- fundamentals of engine operation
- vehicle systems
- vehicle safety systems
- design for the life cycle

The "Big Ideas" for this course include: (i) vehicle operation, service, and maintenance include consideration of social and environmental impacts; (ii) personal service and maintenance interests require the evaluation and refinement of skills; and (iii) tools and technologies can be adapted for specific purposes.

• Textbook Deposit: \$150

## AUTOMOTIVE TECHNOLOGY 12

This course covers operation and overhaul of automotive driveline, power train, fuel, cooling, and electrical systems.

Students are expected to know the following:

- complex automotive repair and maintenance
- vehicle inspection standards
- advanced automotive tools and equipment
- engine and vehicle modifications
- vehicle diagnostic and assessment methods
- transmission and gearing functions
- electrical and control systems
- mechanical systems
- fuel systems
- serviceability, overhaul, and repair
- design for the life cycle
- career options and opportunities in automotive technology
- interpersonal skills for interacting with clients and customers

The "Big Ideas" for this course include: (i) vehicle operation, service, and maintenance include consideration of social and environmental impacts; (ii) personal service and maintenance interests require the evaluation and refinement of skills; (iii) tools and technologies can be adapted for specific purposes.

• Textbook Deposit: \$150

#### **BC FIRST PEOPLES 12**

BC First Peoples 12 explores the cultural expressions to convey the richness, diversity, and resiliency of B.C. First Peoples. Topics include the impact of contact and colonialism continues to affect the political, social, and economic lives of B.C. First Peoples; B.C. First Peoples challenge and resistance to Canada's ongoing colonialism

and how the identities, world views and languages if BC First Peoples are renewed, sustained, and transformed through their connection to the land.

Students are expected to know the following:

- the traditional territories of the B.C. First Nations and relationships with the land
- role of the oral tradition for B.C. First Peoples
- the impact of historical exchanges of ideas, practices, and materials among local B.C. First Peoples and with non-indigenous peoples
- provincial and federal government policies and practices that have affected, and continue to affect, the responses of B.C. First Peoples to colonialism
- resistance of B.C. First Peoples to colonialism
- the role and significance of media in challenging and supporting the continuity of culture, language, and self-determination of B.C. First Peoples
- the commonalities and differences between governance systems of traditional and contemporary B.C. First Peoples
- contemporary challenges facing B.C. First Peoples, including legacies of colonialism

The "Big Ideas" for this course include: (i) the identities, worldviews, and languages of B.C. First Peoples are renewed, sustain, and transformed through their connections to the land; (ii) the impact of contact and colonialism continues to affect the political social, and economic lives of B.C. First Peoples; (iii) cultural expressions convey the richness, diversity, and resiliency of B.C. First Peoples; (iv) through self-governance, leadership, and self determination, B.C. First Peoples challenge and resist Canda's ongoing colonialism.

• Textbook Deposit: TBD

## **BUSINESS COMPUTER APPLICATIONS 12**

This course is designed to develop skills and understanding that will be useful in the business world. Proficient keyboarding remains an essential workplace skill, even an employment requirement, which will be infused throughout the duration of the course. Clear, concise, and effective communication is essential in the workplace, and these skills will be developed. Also, technology is more apart of the business setting than ever before in history, and a basic level of understanding software, business information systems, hardware is necessary.

In this course, students are expected to know:

- computer peripherals
- basic operating systems and software operations on multiple platforms
- industry-standard business application software
- efficient integration of multiple software components within all aspects of business application suites
- business approach to creating and formatting documents and using custom tools for enhancement, including:
  - e-mail protocol and etiquette
  - header, footer, table of contents, mail merge, format, word art, text box

- business protocol, formality, and tone in business documents and applications
- formulas and functions in a spreadsheet
- design, creation, and manipulation of databases and database objects
- calendar scheduling, viewing, and syncing, including resource scheduling in shared calendars
- narration, custom animations, and effects in presentation software
- notetaking and note-management software
- brochures, flyers, calendars, publications, and other business communications
- meeting protocol and etiquette
- file management techniques
- cloud-based computing and work applications
- interpersonal and public relations skills to promote products or services and to interact with potential customers/clients
- industry best practices
- career options and opportunities in various business sectors

The "Big Ideas" for this course include: (i) services and products can be designed through consultation and collaboration, (ii) business creates opportunities to enable change, and (iii) tools an technologies can be adapted for specific purposes.

• Textbook Deposit: TBD

## CALCULUS 12

Calculus 12 is designed for students who have a particular interest in mathematics, or who have career aspirations in the fields of Engineering, Medicine, Mathematics, Sciences, Economics, and some Business Ed programs. Topics include limits, derivatives, application of derivatives, optimization, related rates, integrals, applications of integrals. Students who plan on registering in a university or college Calculus course are strongly recommended to take this course.

Students are expected to know the following:

- functions and graphs
- limits: left and right limits; limits to infinity; continuity
- differentiation: rate of change; differentiation rules; higher order, implicit; application (differentiation)
- integration: approximations; fundamental theorem of calculus; methods of integration; applications (integration)

The "Big Ideas" for this course include: (i) the concept of a limit is foundational to calculus; (ii) differential calculus develops the concept of instantaneous rate of change; (iii) integral calculus develops the concept of determining a product involving a continuously changing quantity over an interval; (iv) derivatives and integrals are inversely related.

- Recommended preparatory course: B in Math 12 Pre-Calculus within the past 5 years
- Textbook Deposit: \$100

#### CHEMISTRY 11

GA available

Chemistry 11 offers students an opportunity to learn important chemical concepts and principles. Topics include safety, scientific method, physical properties, and physical changes of substances, inorganic nomenclature, the mole concept, chemical reactions, stoichiometry, atoms, and the period chart of elements, solution chemistry, and organic chemistry.

Students are expected to know the following:

- quantum mechanical model and electron configuration
- valence electrons and Lewis structures
- chemical bonding based on electronegativity
- bonds/forces
- organic compounds
- applications of organic chemistry
- the mole
- dimensional analysis
- reactions
- stoichiometric calculations using significant figures
- local and other chemical processes
- green chemistry
- solubility of molecular and ionic compounds
- analysis techniques

The "Big Ideas" for this course include: (i) atoms and molecules are building blocks for matter; (ii) organic chemistry and its applications have significant implications for human health, society, and the environment; (iii) the mole is a quantity used to make atoms and molecules measurable; (iv) matter and energy are conserved in chemical reactions; (v) solubility within a solution is determined by the nature of the solute and solvent.

- Recommended preparatory course: Math 10 (Foundations and Pre-Calculus), Science 10, English 10
- Textbook Deposit: \$ 100

#### CHEMISTRY 12

GA available

This is a problem-centered course involving advanced concepts in Chemistry. Topics include reaction kinetics, equilibrium solubility of ionic substances, acids, bases and salts; oxidation and reduction; electrochemistry.

- reaction rate
- collision theory
- energy change during a chemical reaction
- reaction mechanism
- catalysts

- dynamic nature of chemical equilibrium
- Le Chatelier's principle and equilibrium shift
- equilibrium constant (Keq)
- saturated solutions and solubility product (Ksp)
- relative strength of acids and bases in solution
- water as an equilibrium system
- weak acids and weak bases
- titration
- hydrolysis of ions in salt solutions
- applications of acid-base reactions
- the oxidation-reduction process
- electrochemical cells
- electrolytic cells
- quantitative relationships

The "Big Ideas" for this course include: (i) reactants must collide to react, and the reaction rate is dependent on the surrounding conditions; (ii)dynamic equilibrium can be shifted by changes to the surrounding conditions; (iii) saturated solutions are systems in equilibrium; (iv) acid or base strength depends on the degree of ion dissociation; (v) oxidation and reduction are complementary processes that involve the gain or loss of electrons.

- Recommended preparatory course: Chemistry 11, English 10
- Textbook Deposit: \$ 100

## CULINARY ARTS 11

This course is intended for students interested in the preparation of all types of food for small to large groups. Students learn in a large commercial kitchen and are trained to use industrial equipment. Students prepare menus following recipes and techniques demonstrated by the Teacher Chef. The course includes Food Safe Level 1 certification. This course provides 4 credits towards Applied Skills or Fine Arts 11/12. Topics include safety and sanitation, tools and equipment, measurement, menu planning, cooking methods; stocks, sauces, soups, meat preparation, poultry preparation, fish and shellfish, salads and dressings; vegetables; starches, sandwiches, hors d'oeuvres; baking, desserts.

- culinary best practices
- principles of cooking methodology
- diverse cuisine, and the ethics of cultural appropriation
- artistic elements of the culinary arts
- identification and selection of suitable culinary ingredients for a specific recipe and/or cooking method
- anatomy and predations of meat, poultry, and seafood
- dietary restrictions and food allergies, and strategies to address them
- safety in the teaching kitchen, including the nature of pathogens associated with food borne illness and prevention strategies
- operational procedures for kitchen tools and equipment
- literacy related to culinary recipes and procedures, including conversions
- B.C. agricultural practices

• ethical, social, and environmental considerations related to commercial waste management and recycling

The "Big Ideas" for this course include: (i) service and creativity inform the culinary arts; (ii) cuisine design interests require the evaluation and refinement of culinary principles and practices; (iii) tools and technologies can be adapted for specific purposes.

- Recommended preparatory course: English 10 or assessment.
- Food supply fee: \$75 (payable at time of registration Non-refundable)

## CULINARY ARTS 12

This course is intended for students interested in the preparation of all types of food for small to large groups. Students learn in a large commercial kitchen and are trained to use industrial equipment. Students prepare menus following recipes and techniques demonstrated by the Teacher Chef. The course includes Food Safe Level 1 certification. This course provides 4 credits towards Applied Skills or Fine Arts 11/12. Topics include safety and sanitation, tools and equipment, measurement, menu planning, cooking methods; stocks, sauces, soups, meat preparation, poultry preparation, fish and shellfish, salads and dressings; vegetables; starches, sandwiches, hors d'oeuvres; baking, desserts.

Students are expected to know the following:

- culinary best practices
- menu design, including recipe factoring, ratios, and costing
- diverse cuisine and cooking methodologies, including ethnic, multicultural, and Frist Peoples
- artistic elements of the culinary arts
- ethics of cultural appropriation
- appropriate selection of primary and secondary cuts of meat and poultry
- characteristics and properties of culinary ingredients
- methods and principles for seasoning and presentation
- substitutions to facilitate dietary restrictions and food allergies
- safety in the professional kitchen, including the responsibilities of food service operators
- advancements in culinary tools
- social, economic, and environmental effects of food procurement decisions
- career opportunities in the culinary arts industry
- social perceptions of chefs, culinary enthusiasts, and food trends

The "Big Ideas" for this course include: (i) service and creativity inform the culinary arts; (ii) cuisine design interests require the evaluation and refinement of culinary principles and practices; (iii) tools and technologies can be adapted for specific purposes.

- Recommended preparatory course: English 10 or assessment.
- Food supply fee: \$75 (payable at time of registration Non-refundable)

#### EMERGENCY MEDICAL RESPONDER 12, A & B

The EMR course is offered as a partnership program with the JIBC. It is a hands-on, experiential course that gives students the opportunity to learn the fundamentals needed to respond to medical and traumatic

emergencies. This is an excellent opportunity for those wanting to enter careers in health care, ambulance and fire services, and policing. Successful candidates will earn 8 secondary credits that can be used towards graduation, are eligible to apply for an EMR licence through the Emergency Medical Assistants Branch and are able to apply for entry into the JIBC Primary Care Paramedic Program.

• Textbook Deposit: \$200

## ENGLISH FIRST PEOPLES 12

GA Available

The First Peoples Principles of Learning have been affirmed within First Peoples societies to guide the teaching and learning of provincial curricula. Because these principles of learning represent an attempt to identify common elements in the varied teaching and learning approaches that prevail within First Peoples societies, it must be recognized that they do not capture the full reality of the approach used in any single First Peoples society. First Peoples Principles of Learning greatly influence the English Language Arts curriculum and are woven throughout. They lend themselves well to language learning, as they promote experiential and reflexive learning, as well as self-advocacy and personal responsibility in students. They help create classroom experiences based on the concepts of community, shared learning, and trust, all of which are vital to language acquisition.

Students are expected to know the following:

- a wide variety of BC, Canadian, and global First Peoples texts
- a wide variety of text forms and genres
- common themes in First Peoples literature
- reconciliation in Canada
- First Peoples oral traditions—the legal status of First Peoples oral traditions in Canada; purposes of oral texts; the relationship between oral traditions and land/place
- protocols—protocols related to ownership and used of First Peoples oral texts; acknowledgement of territory
- situating oneself in relation to others and place
- processes related to protocols and expectations when engaging with First nations communities and Aboriginal organizations
- text features and processes—reading strategies, oral language strategies, metacognitive strategies writing processes, presentation techniques
- language features, structures, and conventions—features of oral language, elements of style, language change, syntax and sentence fluency, rhetorical devices, usage and conventions, literary elements and devices, literal and inferential meaning, persuasive techniques, citations and acknowledgements

The "Big Ideas" for this course include: (i) the exploration of text and story deepens our understanding of diverse, complex ideas about identity, others, and the world; (ii) oral and other texts are socially, culturally, geographically, and historically constructed; (iii) voice is a powerful and evocative; (iv) First Peoples texts and stories provide insight into key aspects of Canada's past, present, and future; (v) self-representation through authentic First Peoples texts is a means to foster justice; (vi) First Peoples voices and texts play a role within the process of Reconciliation.

- Recommended preparatory course: Literary Studies 11 or assessment.
- Textbook Deposit: \$30 \$100 (teacher dependent)

## ENGLISH STUDIES 12

GA Available

The required English Studies 12 course builds on and extends students' previous learning experiences in English Language Arts and English First Peoples 10 and 11 courses.

The course is designed for all students and provides them with opportunities to know:

- text forms and genres
- appropriation and reclamation of voice
- the evolution of language
- text features and structures—form, function, and genre of texts; features and structures of First Peoples texts; narrative structures found in First Peoples texts; protocols related to the ownership of First Peoples oral texts
- strategies and processes—multimodal writing strategies; metacognitive strategies; writing processes; reading strategies; oral language strategies
- language features, structures, and conventions—elements of style; usage and conventions; citation techniques; literary elements and devices

The "Big Ideas" for this course include: (i) the exploration of text and story deepens our understanding of diverse, complex ideas about identity, others, and the world; (ii) people understand text differently depending on their worldviews and perspectives; (iii) texts are socially, culturally, and historically constructed; (iv) language shapes ideas and influences others; (v) questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

- Recommended preparatory course: English 10
- Textbook Deposit: \$30 \$100 (teacher dependent)

## **EXPLORATIONS IN SOCIAL STUDIES 11**

This course provides students with a well-rounded knowledge of the Social Studies curriculum. Students will be exposed to a variety of topics, including Human Geography, Social Issues, 20<sup>th</sup> Century History, Law Studies, and B.C. First Peoples. The course will prepare students for senior Social Studies courses, as well as post-secondary programs where they need to be creative and independent thinkers who can articulate ideas, manage their time and be self-directed learners.

Students are expected to know the following:

At least 3 of the following -

- social, cultural, or technological innovations and developments in the 20<sup>th</sup> century
- colonialism and contemporary issues for Indigenous people in Canada and around the world

- current issues in local, regional, national, and global politics as represented in lass media
- natural resource use and local, regional, national, or global development
- economic development in Asia
- systems of power and governance in global cultures
- diversity of BC First Peoples territories and communities
- rights of individuals in Canada
- representations of natural and human-made phenomena
- methods used by individuals, groups, and organizations to promote social justice
- fundamental nature of knowledge, existence, and reality
- sacred texts, traditions, and narratives of cultures
- contemporary theories of money and investment
- recognition of and responses to genocide
- global issues in urbanization

The "Big Ideas" supporting this curriculum are:

- a) rapid industrialization, urbanization, and economic growth in Asia in the late 20<sup>th</sup> century have created complex social, political, and environment challenges
- b) cultural expressions convey the richness, diversity, and resiliency of BC First Peoples
- c) understanding the diversity and complexity of cultural expressions in one culture enhances our understanding of other cultures
- d) physical features and natural resources demographic patterns and population distribution
- e) understanding how political decisions are made is critical to being an informed and engage citizen
- f) the rapid development and proliferation of communication and transportation technologies in the 20th century led to profound changes in personal and national identities
- g) Indigenous peoples are reclaiming mental, emotional, physical, and spiritual well-being despite the continuing effects of colonialism
- h) religion can powerfully shape social, political, legal, and environmental values
- i) the implementation of economic theories has profound effects on social and political decision making and movements
- j) the intentional destruction of peoples and their cultures is not inevitable, and such attempts can be disrupted and resisted
- k) a society's laws and legal framework affect many aspects of people's daily lives
- l) examining questions in philosophy allows people to question their assumptions and better understand their own beliefs
- m) social justice initiatives can transform individuals and systems
- n) decision making in urban and regional planning requires balancing political, economic, and environmental factors
- Textbook Deposit: \$30 \$100 (teacher dependent)

## FOUNDATIONS ENGLISH, LEVEL 7

(This course is for adults, or for high school students as an English 11 prep course.)

This course is designed to support students as they refine, clarify, and adjust their written communication through practice and revision. Students will read and study compositions by other writers and be exposed to a variety of styles as models for the development of their writing. The course provides opportunities for students to, with increasing independence, study, create, and write original and authentic pieces for a range of purposes and real-world audiences. They will expand their competencies through processes of drafting, reflecting, and revising to build a body of work that demonstrates expanding breadth, depth, and evidence of writing for a range of situations. They will develop confidence in their abilities as they consolidate their writing craft. This course is structured to assist students with making the transition from the Foundations Program to the Academic Program.

It is expected that students will know the following:

Oral Language (Speaking and Listening)

- engage with other in sustained conversation
- demonstrate an understanding of the detailed information communicated through a variety of spoken sources
- prepare and give a formal verbal presentation that meets specific and predefined criteria

#### Reading and Viewing

- read and demonstrate an understanding of a range of texts
- read and demonstrate an understanding of a range of literary texts from a variety of genres and forms
- read and demonstrate an understanding of the content presented in a variety of informational and persuasive texts
- view and demonstrate an understanding of the meaning conveyed by a variety of visual media
- before reading and viewing, make predictions about the content and meaning of texts
- during reading and viewing, contract meaning from texts
- after reading and viewing, develop and monitor understanding of the meaning conveyed in texts
- analyze how structures and features convey meaning

#### Writing and Representing

- enhance meaning and artistry by using conventions, forms, and structures of writing and representing, appropriate to purpose and audience
- write a variety of personalized and creative texts for a range of purposes and audiences
- write a variety of descriptive, narrative, and expository essays
- create a variety of visual representations to construct and convey meaning
- generate, develop, and organize ideas for writing and representing
- during writing and representing, draft and compose
- revise and edit writing

#### Evidence of Thinking

• reflect on and assess own speaking and listening

- reflect on and assess own reading and viewing
- reflect on and assess own writing and representing
- self-assess and monitor own ability to construct meaning and deepen understanding in response to texts

The "Big Ideas" supporting the curriculum are: (a) the exploration of texts and story deepens our understanding of diverse, complex ideas about identity, others, and the world; (b) people understand text differently depending on their worldviews and perspectives; (c) texts are socially, culturally, geographically, and historically constructed; (d) language shapes ideas and influences others; (e) questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens; (f) people are empowered by being able to communicate effectively; and (g) engagement with writing processes can support creativity and enhance clarity of expression.

• Textbook Deposit: \$30 – \$100 – teacher dependent

## FOUNDATIONS MATH, LEVEL 7

(This course is for adults, or for high school students as a Math 11 prep course.)

This course is an amalgam of Foundations Math Level 7 with Workplace Mathematics 11. It is structured to assist students with making the transition from the Foundations Program to the Academic Program.

It is expected that students will:

Measurement (Apprenticeship and Workplace)

- demonstrate an understanding of the System International (SI)
- demonstrate an understanding of the imperial system
- solve problems that involve SI and imperial linear measurements, including decimal and fraction measurements
- solve problems that involve SI and imperial measurements of regular, composite, and irregular 2D shapes and 3D objects

Geometry (Apprenticeship and Workplace)

- demonstrate an understanding of similarity of convex polygons by defining edges, faces, and vertices
- demonstrate an understanding of primary trigonometric ratios (sine, cosine, tangent)
- solve problems that involve e parallel, perpendicular, and transversal lines, and pairs of angles formed between them
- demonstrate an understanding of angles, including acute, right, obtuse, straight, and reflex
- demonstrate an understanding of the Pythagorean theorem

Number (Apprenticeship and Workplace)

- solve problems that involve unit pricing and currency exchange using proportional reasoning
- demonstrate an understanding of income

Algebra (Apprenticeship and Workplace)

• solve problems that require the manipulation and application of formulas

Measurement (Math Foundations)

- solve problems
- apply proportional reasoning to problems that involve conversions between SI and imperial units of measure
- solve problems, using SI and imperial unites, that involve surface area and volume of 3D objects
- apply the primary trigonometric ratios (sine, cosine, tangent) to solve problems that involve right triangles

Algebra and Number (Math Foundations)

- demonstrate an understanding of factors of whole numbers
- demonstrate an understanding of irrational numbers
- demonstrate an understanding of powers with integral and rational exponents
- multiply polynomial expressions
- demonstrate an understanding of common factors and trinomial factoring

Relations and Functions (Math Foundations)

- interpret and explain the relationships among data, graphs, and situations
- demonstrate an understanding of relations and functions
- demonstrate an understanding of slope
- describe and represent linear relations
- determine the characteristics of the graphs of linear relations
- relate linear relations to their graphs
- determine the equation of a linear relation to solve problems
- represent a linear function using function notation
- solve problems that involve systems of linear equations in two variables, graphically and algebraically

The "Big Ideas" supporting the curriculum are: (a) proportional reasoning is used to make sense of multiplicative relationships; (b) mathematics informs financial decision making; (c) 3D objects are often represented and described in 2D; (d) flexibility with number builds meaning, understanding, and confidence; and (e) representing and analyzing data allows us to notice and wonder about relationships.

• Textbook Deposit: TBD

## FOUNDATIONS OF MATHEMATICS 11

GA Available

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus.

- forms of mathematical reasoning
- angle relationships

- graphical analysis: linear inequalities, quadratic functions, systems of equations, optimization
- applications of statistics
- scale models
- financial literacy: compound interest, investments, and loans

The "Big Ideas" for this course include: (a) similar shapes and objects have proportional relationships that can be described, measured, and compared; (b) optimization informs the decision-0making process in situations involving extreme values; (c) logical reasoning helps us discover and describe mathematical truths; and (d) statistical analysis allows us to notice, wonder about, and answer questions about variation.

- Recommended preparatory course: C+ in Math 10
- (Note: Math Essentials, Applications, or Workplace are <u>not</u> recommended preparatory courses)
- Textbook Deposit: \$100 teacher dependent or
- Workbook Fee: \$30 (Non-refundable) teacher dependent

## FOUNDATIONS OF MATHEMATICS 12

GA Available

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus.

Students are expected to know the following:

- geometric explorations: constructions, conics, fractals
- graphical representations of polynomial, logarithmic, exponential, and sinusoidal functions
- regression analysis
- combinatorics
- odds, probability, and expected value
- financial planning

Throughout the course, the "Big Ideas" that will guide the delivery of the curriculum are: (a) probabilistic thinking informs decision making in situations involving chance an uncertainty; (b) modelling data requires an understanding of a variety of functions; (c) mathematical analysis informs financial decisions; and (d) through explorations of spatial relationships, we can develop a geometrical appreciation of the world around us.

- Recommended preparatory course: C+ in Math 11 (Principles or Foundations) within the past 5 years
- Textbook Deposit: \$100 teacher dependent or
- Workbook Charge: \$30 (Non-refundable) teacher dependent

#### INTERDISCIPLINARY STUDIES: ENGLISH STUDIES 12 with BC FIRST PEOPLES 12 (8 credits)

This course will cover all the topics for English Studies 12 (see above) but will focus on literature and themes from a social justice perspective. BC First Peoples 12 is an extremely relevant course given the movements of "Every Child Matters" and "Truth and Reconciliation". This course will examine how BC First Peoples' identities, worldviews, and languages are closely tied to their connection with the land. Students will learn how the impact of colonialism continues to affect the political, social, and economic lives of BC First Peoples. In addition, students

will investigate and study the traditional territories of BC First Peoples, as well as the relationships that developed between the BC First People and the Provincial and Federal governments over time.

For a detailed and individualized description of these courses, see "ENGLISH STUDIES 12" and "BC FIRST PEOPLES 12" course descriptions in this book.

- Recommended preparatory course: English 11 or English Language Arts 11
- Textbook Deposit: \$30 \$100 (teacher dependent)

#### INTERDISCIPLINARY STUDIES: ENGLISH STUDIES 12 with PHILOSOPHY 12 (8 credits)

Philosophy/English Interdisciplinary Studies 12 (aka English Studies 12/Philosophy 12) at Queen Elizabeth Continuing Education is designed to empower students by providing them with strong critical thinking skills, an understanding and perception of literature and how it connects to major philosophic concepts like logic and philosophy of science, metaphysics, epistemology, ethics, and social and political philosophy. Students are facilitated to be creative and reflective; to construct a sense of personal and cultural identity; and to be respectful of a range of perspectives and worldviews. This class provides an integrated and holistic approach to teaching and learning. All five of the Language Arts elements—reading, listening, viewing, speaking, and representing—are interconnected and linked to philosophy. The development of competency in philosophy supports development of competency in English Language Arts, often simultaneously.

For a detailed and individualized description of these courses, see "ENGLISH STUDIES 12" and PHILOSOPHY 12" course descriptions in this book.

- Recommended preparatory course: English 11 or English Language Arts 11
- Textbook Deposit: \$30 \$100 (teacher dependent)

#### INTERDISCIPLINARY STUDIES: ENGLISH STUDIES 12 with SOCIAL JUSTICE 12 (8 credits)

This course will cover all the topics for English Studies 12 (see above) but will focus on literature and themes from a social justice perspective. Use individual and societal worldviews within a social/literary context to engage learners to think critically and creatively about language and understanding of individuality within a broader cultural context.

Students will:

- (1) explore texts from a variety of sources, within historically marginalized or minority groups;
- (2) explore works within First Nations, Feminist perspectives, SOGI, and Black Lives Matter movement;
- (3) deepen understanding of self and others within a changing world by examining social constructs and the impact they have had on cultural perspectives;
- (4) contribute to Reconciliation by building a greater understanding of the knowledge and perspective of First Peoples; and
- (5) expand what it means to be educated citizens within social constructs by examining evidence, literature, and critically examine the impact events, perspectives have had on creating cultural identity.

For a detailed and individualized description of these courses, see "ENGLISH STUDIES 12" and "BC SOCIAL JUSTICE 12" course descriptions in this book.

- Recommended preparatory course: English 11 or English Language Arts 11
- Textbook Deposit: \$30 \$100 (teacher dependent)

## LAW STUDIES 12

This course introduces students to the laws that govern Canada, specifically how and why laws are made by political and legal institutions. The course which explores laws that protect the public and individuals as well as how disputes between private individuals are resolved.

Students are expected to know the following:

- the Constitution of Canada and the Canadian Charter of Rights and Freedoms
- structured and powers of the federal and provincial courts and administrative tribunals
- key areas of law such as criminal law, civil law and family, children, and youth law
- Canadian legislation concerning First Peoples
- Indigenous legal orders and traditional laws in Canada and other global jurisdictions
- Canada's correctional system, and principles of rehabilitation, punishment, and restoration
- structures and roles of global dispute ret solution agencies and courts

The "Big Ideas" behind the curriculum are: (a) understanding legal rights and responsibilities allows citizens to participate more fully in society; (b) laws can maintain the status quo and can also be a force for change; (c) a society's laws and legal framework affect many aspects of people's daily lives; and (d) laws are interpreted, and these interpretations may evolve over time as society's values and worldviews change.

• Textbook Deposit: \$100 – teacher dependent

#### LIFE SCIENCES 11

GA Available

In this course, students will study the scientific method, characteristics of living things, cell biology, evolution and genetics, microbiology, taxonomy, among other subjects.

- levels of organization
- cell structure and function
- sexual and asexual reproduction
- energy transformations in cells
- viruses
- First Peoples understandings of interrelationships between organisms
- microevolution: adaptation to changing environments, changes in DNA, natural selection
- macroevolution: speciation, processes of macroevolution, evidence for macroevolution
- artificial selection and genetic modifications

- single-celled and multi—celled organisms
- trends in complexity among various life forms
- evidence for phylogenetic relationships
- taxonomic principles for classifying organisms
- First Peoples knowledge on classification
- similarities and differences between domains and kingdoms

The "Big Ideas" behind this curriculum are: (a) life is a result of interactions at the molecular and cellular levels; (b) evolution occurs at the population level; and (c) organisms are grouped based on common characteristics.

• Textbook Deposit: \$100 – teacher dependent

## LITERARY STUDIES 11

GA Available

Literary Studies 11 (aka English Studies 11) allows students to delve deeply into literature. Students can explore specific themes, periods, authors, or areas of the world through literary works (fiction and non-fiction) in a variety of media. Giving students the choice of a range of literary topics allows them to follow their passion and at the same time:

- (1) increase their literacy skills through close reading of appropriately challenging texts,
- (2) enhance their development of the English Language Arts curricular competencies, both expressive and receptive,
- (3) expand their development as educated global citizens,
- (4) develop balance and broaden their understanding of themselves and the world, and
- (5) further develop higher-level thinking and learning skills.

Also, this course is designed to support students as they refine, clarify, and adjust their written communication through practice and revision. Students will read and study compositions by other writers and be exposed to a variety of styles as models for the development of their writing.

- text forms and genres
- text features and structures:
  - form, function, and genre of texts
  - elements of visual/graphic texts
  - narrative structures found in First Peoples texts
  - protocols related to the ownership of First Peoples oral texts
- strategies and processes:
  - reading strategies
  - oral language strategies
  - metacognitive strategies
  - writing processes
  - design processes

- language features, structures, and conventions
  - elements of style
  - usage and conventions
  - citation techniques
  - literary elements and devices
  - literal meaning and inferential meaning

The "Big Ideas" that will guide the instruction are: (a) the exploration of text and story deepens our understanding of diverse, complex ideas about identity, others, and the world; (b) people understand text differently depending on their world views and perspectives; (c) texts are socially, culturally, geographically and historically constructed; (d) language shape ideas and influences others; and (e) questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

- Recommended preparatory course: English 10 or English Language Arts 10
- Textbook Deposit: \$30 \$100 (teacher dependent)

## PHILOSOPHY 12

The course is designed to empower students by providing them with strong critical thinking skills, an understanding of major philosophic concepts, such as logic and philosophy of science, metaphysics, epistemology, ethics, and social/political philosophy.

Students are expected to know:

- methods of reasoning and argument in philosophy
- metaphysical theories about the nature of reality
- epistemological theories about knowledge and truth
- social and political philosophy
- theories of morality, ethics, and aesthetics

The "Big Ideas" that inform this curriculum are: (a) philosophy is a discipline that examines the fundamental nature of knowledge, reality, and existence; (b) philosophy provides tools for investigating meaning and fostering understanding of different ways of thinking; (c) examining questions in philosophy allows people to question their assumptions and better understand their own beliefs; and (d) while philosophical questions often examine issues with no definitive answers, logic, and reasoned arguments can show which answers have more or less value.

• Textbook Deposit: \$30 – \$100 (teacher dependent)

## PHYSICS 11

GA Available

Physics 11 is an introductory course concentrating on mathematical skills that focuses on the principles and theories of physics, encourages investigation of physical relationships, and illustrates the relationship between theory and application. The following topics are investigated: Wave Motion and Geometric Optics; Kinematics; Dynamics; Energy; Special Relativity; Nuclear Fission and Fusion.

Students will be expected to know the following:

- vector and scalar quantities
- horizontal uniform and accelerated motion
- projectile motion
- contact forces and the factors that affect magnitude and direction
- mass, force of gravity. And apparent weight
- Newton's laws of motion and free-body diagrams
- balanced and unbalanced forces in systems
- conservation of energy; principle of work and energy
- power and efficiency
- simple machines and mechanical advantage
- applications of simple machines by First Peoples
- electric circuits (DC), Ohm's law and Kirchhoff's laws
- thermal equilibrium and specific heat capacity
- generation of propagation of waves
- properties and behaviours of waves
- characteristics of sound
- resonance and frequency of sound
- graphical methods in physics

The "Big Ideas" that will guide the course are: (a) an object's motion can be predicted, analyzed, and described; (b) forces influence the motion of an object; (c) energy is found in different forms, is conserved, and has the ability to do work; and (d) mechanical waves transfer energy but not matter.

- Recommended preparatory course: C+ in Math 10 (Principles, Pre-Calculus, or Foundations) within the past 5 years and Science 10. Math 11 is an asset.
- Textbook Deposit: \$100

## PHYSICS 12

GA Available

Physics 12 is an advanced course for those who plan to continue studying science at a post secondary institution. Physics 12 concentrates heavily on mathematical skills. This course will help students develop analytical, experimental and problem-solving skills.

- frames of reference
- relative motion within a stationary reference frame
- postulates of special relativity
- relativistic effects within a moving reference frame
- static equilibrium
- uniform circular motion: centripetal force and acceleration; changes to apparent weight
- First Peoples knowledge and applications of forces in traditional technologies
- gravitational field and Newton's law of universal gravitation
- gravitational potential energy

- gravitational dynamics and energy relationships
- electric field and Coulomb's law
- electric potential energy, electric potential, and electric potential difference
- electrostatic dynamics and energy relationships
- magnetic field and magnetic force
- electromagnetic induction
- applications of electromagnetic induction
- impulse and momentum
- conservation of momentum and energy n collisions
- graphical methods on physics

The instruction will be guided by the "Big Ideas" of the course, which are: (a) measurement of motion depends on our frame of reference; (b) forces can cause linear and circular motion; (c) forces and energy interactions occur within fields; and (d) momentum is conserved within a closed and isolated system.

- Recommended preparatory course: a C+ in Physics 11 and Mathematics 11
- Textbook Deposit: \$100

#### PRE-CALCULUS 11

GA Available

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, such as Sciences or Engineering.

Student are expected to know the following:

- real number system
- powers with rational exponents
- radical operations and equations
- polynomial factoring
- rational expressions and equations
- quadratic functions and equations
- linear and quadratic inequalities
- trigonometry: non-right angles and angles in standard position
- financial literacy: compound interest, investments, loans

The curricular 'Big Ideas'' that will guide this course are: (a) algebra allows us to generalize relationships through abstract thinking; (b) the meanings of, and connections between, operations extend to powers, radicals, and polynomials; (c) quadradic relationships are prevalent in the world around us; and (d) trigonometry involves using proportional reasoning to sole indirect measurement problems.

- Recommended preparatory course: C+ in Math 10 within the past 5 years
- (Note: Math Essentials, Applications, or Workplace are <u>not</u> recommended preparatory courses)
- Textbook Deposit: \$100 or
- Workbook Charge: \$ 30 (Non-refundable)

#### PRE-CALCULUS 12

GA Available

This course is required by some specific programs by post-secondary institutions.

Students will be expected to know the following:

- transformations of functions and relations
- exponential functions and equations
- geometric sequences and series
- logarithms: operations, functions, and equations
- polynomial functions and equations
- rational functions
- trigonometry: functions, equations, and identities

The "Big Ideas" guiding the curriculum are: (a) using inverses is the foundation of solving equations and can be extended to relation ships between functions; (b) understanding the characteristics of families of functions allows us to model and understand relationships and to build connections between classes of functions; and (c) transformations of shapes extend to functions and relations in all of their representations.

- Recommended preparatory course: C+ in Math 11 (Principles or Pre-Calculus) within the past 5 years
- Textbook Deposit: \$100 or
- Workbook Charge: \$30 (Non-refundable)

#### SCIENCE FOR CITIZENS 11

GA Available

This course is an issues-oriented exploration of topics designed to promote scientific understanding and analytical skills. It explores scientific topics that a person encounters in their daily lives and in a work environment. The course also explores the science behind numerous environmental concerns and forensic investigations.

- evidence-based decision making through science
- personal and public health practices, including First Peoples traditional health and healing practices
- impact of technologies
- personal safety and awareness
- workplace safety
- certifications
- practical applications of science in the workplace
- impacts of technology in the workplace
- applications of materials science
- beneficial scientific innovations
- natural hazards and responses
- human impact on Earth's systems: natural resources; effects of climate change
- actions and decisions affecting the local and global environment, including those of First Peoples

The "Big Ideas" supporting the curriculum are: (a) scientific processes and knowledge inform our decision and impact our daily lives; (b) scientific knowledge can he used to develop procedures, techniques, and technologies that have implications for places of employment; and (c) scientific understanding enables humans to respond and adapt to changes locally and globally.

• Textbook Deposit: \$100

## SOCIAL JUSTICE 12

Social Justice 12 is organized around key issues such as gender, race, marginalized groups, poverty, and animal rights. These will be framed by an understanding of the definitions, frameworks, and interpretations of social justice as seen through the lens of social injustices in Canada and the world affecting individuals, groups, and society. Students will also examine the role of how governmental and non-governmental organizations play in issues of social justice and injustice. In addition, there is an opportunity to learn about the processes, methods, and approaches individuals, groups, and institutions use to promote social justice.

Students are expected to know the following:

- definitions, frameworks, and interpretations of social justice
- self-identity and an individual's relationship to others
- social justice issues
- social injustices in Canada and the world affecting individuals, groups, and society
- governmental and non-governmental organizations in issues of social justice and injustice
- processes, methods, and approaches individuals. Groups, and institutions use to promote social justice

The "Big Ideas" driving the curriculum are: (a) social justice issues are interconnected; (b) individual worldviews shape and inform our understanding of social justice issues; (c) the causes of social injustice are complex and have lasting impacts on society; and (d) social justice initiatives can transform individuals and systems.

• Textbook Deposit: \$100

#### SPECIALIZED SCIENCE 12

GA Available

The knowledge of science opens the door to tomorrow. This course will introduce you to many different disciplines of science such as Environmental and Earth Science, Physics, Biology, and Chemistry. What is different about this course is you will be learning about these subjects from an applied perspective. As an example, have you ever wondered how climate change affects our health, or how earth's rock layers affect how we construct buildings today? This course consists of real-life science for real life experiences, and you will help steer which topics you want to study.

Students are expected to know the following:

At least 3 of the following -

- related Content from Chemistry 11
- related Content from Chemistry 12

- related Content from Earth Sciences 11
- related Content from Environmental Science 11
- related Content from Environmental Science 12
- related Content from Geology 12
- related Content from Life Sciences 11
- related Content from Physics 11
- related Content from Physics 12
- related Content from Science for Citizens 11

Any additional content not covered by the above

The "Big Ideas" driving the curriculum are: (a) biodiversity is dependent on the complex interactions and processes between biotic and abiotic factors; (b) climate change impacts biodiversity and ecosystem health; (c) all members of a species have common characteristics that evolve over time; (d) our evolving understanding of genetics has implications for health, society, and environment; (e) chemical reactions are due to energy changes that result from the breaking and reformation of bonds; (f) changes in equilibrium drive chemical processes; (g) energy is always conserved; (h) forces interact within fields and cause linear and circular motions; (i) geological materials can change as they cycle through the geosphere and can be used as resources; and (j) rock layers and the fossil record reflect geologic changes through time.

• Textbook Deposit: \$100

#### WORK EXPERIENCE 12 (4 or 8 credits)

This 4-credit course is intended to provide credits to students who currently have a job or would like to gain valuable work experience. The first few classes will cover resumes, cover letters, safety, worker's rights, and proper workplace communication. Next, students will be inserted into a workplace to learn "on the job". Students will return on the last day of class to regroup, learn from each other's experience, and hand-in a final updated resume. NOTE: If motivated, students may be able to complete two separate work experiences and receive credit for two separate work experience classes (8 credits).

#### WORKPLACE MATHEMATICS 11

GA Available

This practical course is designed for students who are planning to enter a technical college, trade school, or find a job. It does not satisfy entry requirements for university-level academic programs but does complete the secondary school graduation program requirement for mathematics. Content varies, but generally includes Personal Finance (budgeting, borrowing, investing banking), Area and Volume, Trigonometry (right triangles), 3-D Modeling, Formulas, Graphing, Proportion, and Linear Relations.

- financial literacy: personal investments, loans, and budgeting
- rate of change
- how probability and statistics are used ion different contexts
- interpreting graphs in society
- 3D objects: angles, views, and scale diagrams

The "Big Ideas" behind the curriculum are: (a) proportional reasoning is used to make sense of multiplicative relationships; (b) mathematics informs financial decision making; (c) 3D objects are often represented and described in 2D space; (d) flexibility with number builds meaning, understanding, and confidence; and (e) representing and analyzing data allows us to notice and wonder about relationships.

- Recommended preparatory course: C in Math 10, Foundations Math Level 7, or equivalent
- Textbook Deposit: \$TBD

## YELL (Entrepreneurship 12)

YELL is a one-of-a-kind program that will help students to develop entrepreneurial skills to move into careers after graduation. Characteristics of the learning environment accelerated learning, business incubator, Industry exploration, and venture challenge.

Students are expected to know the following:

- recognition of entrepreneurial opportunities
- types of business ventures and social entrepreneurship
- factors that can promote innovation and entrepreneurial success, including networking, product/service knowledge, and market analysis
- characteristics of the global market and local economic trends
- components of starting a small business, including registration and financial considerations
- ways to protect intellectual property
- design for the life cycle
- interpersonal and presentation skills to promote products and/or services and to interact with clients
- emerging career options for young entrepreneurs
- ethics of cultural appropriation and plagiarism

The "Big Ideas" for this course are: (a) design for the life cycle includes consideration of social and environmental impacts; (b) services and products can be designed through consultation and collaboration; and (c) tools and techniques can be adapted for specific purposes.