

JOHNSTON HEIGHTS SECONDARY

IB MYP World School Since 2017

IB Diploma Programme World School – September 2021

Grade 11-12 Course Selection 2022-23





Welcome to Johnston Heights Secondary School

At Johnston Heights Secondary School, we are a learning community of over 1400 students and staff from grades 8 to 12. We have a strong tradition of excellence in Academics, Fine Arts, Citizenship, Athletics, and Career Development. We are proud to be the largest authorized International Baccalaureate (IB) Middle Years Programme (MYP) School in the Province. Starting in September 2021, we are now also offering the IB Diploma Programme, which will reshape our school and offer new opportunities for our senior students. It is our privilege to enter into this journey of learning with students as they prepare for the challenges of life after high school graduation.

This Course Selection book is produced to assist you in becoming better informed as you make your course selections as a secondary school student at Johnston Heights Secondary School. The courses offered at Johnston Heights follow the guidelines set out by the BC Ministry of Education, the Surrey School District #36, and the IB Middle Years and Diploma Programmes.

Along with this book, the school's website is a useful source of course selection and school information <http://www.surreyschools.ca/schools/johnht/>.

Administrative Team:	Ms. K. Sadhra	Principal	
	Ms. A. Lahnert	Vice-Principal	(A-K)
	Mr. S. Campbell	Vice-Principal	(L-Z)

Counsellors:	Ms. T. Tifenbach (A-D)	Mr. M. Sharma (E-K)	Ms. R. Flack/ Mr. B. Emmerson (L-Q)	Ms. E. Domingo (R-Z)
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Course Planning

The courses offered at Johnston Heights Secondary follow the guidelines set out by the Ministry of Education and the Surrey School Board and consist of a combination of core courses and elective courses. The courses you choose will lead you on your path to graduation and allow you to explore your capabilities and interests.

It is important to review your graduation program carefully and to choose your courses wisely. You need to ensure you have enough credits to meet graduation requirements. When you choose your electives, keep in mind your goals or plans for after high school graduation. For instance, if you would like to attend a certain program or attend a post-secondary institution you will need to meet their specific requirements. You can/will learn about different programs in your Career courses.

Since selecting elective courses is such an important process, it should be carried out in consultation with your parents. Courses with insufficient enrollment will not be offered; therefore, it is important that students choose alternate electives with care. Study the contents of this course selection booklet carefully. If you have any questions or concerns, feel free to speak to or make an appointment with a school counsellor.

Graduation Requirements

In order to obtain a British Columbia Certificate of Graduation (a Dogwood Diploma) issued under the authority of the Minister of Education you must satisfy the Graduation requirements of the British Columbia School System.

2018 Graduation Program

Students will need to earn a minimum of 80 credits to graduate. These 80 credits must consist of specific required courses as well as elective courses. Of these credits, a total of 52 credits are derived from the required courses, which are listed below. The remaining 28 credits are made up of elective courses, where 12 of these credits must be at the Grade 12 level.

2018 Graduation Program Requirements

<u>Required Courses</u>	<u>Credits</u>	<u>Minimum Required Electives</u>	<u>Credits</u>
English 10, 11 and 12	12	Gr 12 Elective	4
Science 10	4	Gr 12 Elective	4
Science 11 or 12	4	Total of Min. Gr 12 Electives Credits	<u>8</u>
Math 10	4	Gr 10 or 11 or 12 Elective	4
Math 11 or 12	4	Gr. 10 or 11 or 12 Elective	4
Social Studies 10	4	Gr 10 or 11 or 12 Elective	4
A Social Studies 12	4	Gr 10 or 11 or 12 Elective	4
Physical and Health Education 10	4	Gr 10 or 11 or 12 Elective	4
Fine Arts and/or Applied Skills 10, 11, 12	4	Total of Additional Elective Credits	<u>20</u>
Two (2) Career Courses and Capstone	8	SubTotal Elective Credits	28
Required Courses Total Credits	<u>52</u>		
		Grand Total Credits	<u>80</u>
		Grand Total Credits	<u>80</u>

Johnston Heights IB Diploma Programme

Johnston Heights' IB Diploma Programme is a 2-year senior programme, and we are excited that our first cohort started in September of 2021! As this is a new program of choice at Johnston Heights, we have embedded additional information beyond the typical Course Selection information. Although the IB DP Programme is designed to be taken as a complete program of study, students who are interested in taking a partial selection of the options may be able to do this as well. During course selection, an option will be available for current Grade 10 students to indicate an interest in the IB DP Programme. For any questions you may be having, see Ms. Hayler in the IB Centre.

About the Programme

IB Diploma Programme (DP) is a 2-year programme, which begins in grade 11 and continues into grade 12. Successful completion of the programme framework will earn students the IB Diploma. Students can apply to post-secondary using unique admission criteria as IB DP students.

The programme aims to develop students who have excellent breadth and depth of knowledge—students who flourish physically, intellectually, emotionally and ethically. The DP is an academically challenging and balanced programme of education. It addresses the intellectual, social, emotional and physical well-being of students, and is respected by universities across the globe. Each of the IB's programmes, including the DP, is committed to the development of students according to the attributes shown in the IB learner profile (IBO).

The Diploma Programme (DP) curriculum is made up of six subject groups and the DP core, comprising theory of knowledge (TOK), creativity, activity, service (CAS) and the extended essay (EE). Through the Diploma Programme (DP) core, students reflect on the nature of knowledge, complete independent research and undertake a project that often involves community service.

Students choose courses from the following subject groups: studies in language and literature; language acquisition; individuals and societies; sciences; mathematics; and the arts. Students may opt to study an additional sciences, individuals and societies, or languages course, instead of a course in the arts.

Students will take some subjects at higher level (HL) and some at standard level (SL). HL and SL courses differ in scope but are measured according to the same grade descriptors, with students expected to demonstrate a greater body of knowledge, understanding and skills at higher level.

Each student takes at least three (but not more than four) subjects at higher level, and the remaining at standard level. Standard level subjects take up 150 teaching hours. Higher level comprises 240 teaching hours.

More information about IB Diploma Programme can be found at:

<https://www.ibo.org/programmes/diploma-programme/>

Application Process & Fees

Current Johnston Heights and non-Johnston Heights Grade 10 students are eligible to apply for the IB Diploma Programme. Online applications will be available in December of the student's Grade 10 year and be open for a two-week period. Exact dates for the application opening and closing will be published in the school calendar and on the school website in September. Late applications will be accepted, but these applicants will be placed on a waitlist. Applications can be accessed on the school website once the application period begins. The online application uses Microsoft Forms, so students should login to their Microsoft accounts using their school email. The online application requires students to supply the following:

- o 1-page resume
- o Email address for a teacher or community coach reference
- o 300 word letter of intent
- o IEP (if applicable)

Students applying from outside of Johnston Heights must also supply/complete the following:

- o Record of Gr. 9 & 10 attendance
- o Record of Gr. 9 & 10 marks
- o JH school registration forms (accessed online).

The application will invite students to select their course preferences. This is preliminary course selection and will not be finalized until successful applicants have met with the school counsellor for a formal course selection. Students are encouraged to read the course descriptions in the JH course selection book before making their preferences known.

After applications are processed, all applicants will be invited to interview with the IB DP Coordinator. The interview will review the student's suitability for and interest in the programme.

Thereafter, applicants will be notified of the result of their application. Successful applicants will be invited to complete a formal course selection with the school counsellor and attend a programme orientation. Unsuccessful applicants will be held on a waitlist should space become available.

There is no fee for the programme beyond the examination fees, which are approximately \$183 per exam to be paid in year two of the programme. However, financial difficulties should not be a deterrent from applying, as financial support is available on a case-by-case basis. Students should speak to the IB DP Coordinator with concerns regarding financial support.

Admissions Criteria

Johnston Heights has approximately 75 seats for each DP cohort. Students and their parents will need to self-evaluate whether they are suitable candidates for this programme. **“The DP is a rigorous course of study for motivated students. That said, prior academic success is less an indicator of ability to earn the diploma than are a student’s determination to do his or her best, willingness to be organized in order to complete the work while leading a full, balanced life, and a strong commitment to learning in and beyond the classroom”** (IBO FAQ). Therefore, there is no minimum grade average for programme admission.

All IB programmes, including the DP, are inclusive, welcoming all types of learners and value diversity. Johnston Heights supports inclusive practices and has published Inclusion Policy. This policy outlines our school’s commitment to learning diversity and the inclusive practices that can be offered to support students in the Diploma Programme.

It is important that students and parents understand that **“success in the DP is best measured by the value added in individual student development and not by the diploma score”** (IBO, Diploma Programme: From Principles to Practice, 2015). This idea drives our admissions decisions at Johnston Heights. The skills that student possess will determine their successful transition into and experience in the DP. All students are invited to apply who have:

- demonstrated growth and strength in the IB Learner Profile traits (pictured)
- are passionate about learning
- are resilient
- are excited for a rewarding new challenge.

Students and parents should contact the Johnston Heights IB Diploma Programme Coordinator with any questions.

IB DP Course Candidate Option

Students are encouraged to take the full IB Diploma when capable of doing so. However, the IB DP Course Candidate option is for students who do not want to take the full IB Diploma Programme, but would like to take up to three IB DP courses of keen interest. Priority placement in the IB DP courses will be given to students in the full diploma programme. Remaining seats will be offered to course candidate students upon request.

IB DP courses are two-years in length, starting in grade 11 and continuing into grade 12. By electing to take an IB DP course, course candidate students are **committing** to taking the course for both the grade 11 and 12 years.

Students electing to take an IB DP course must complete the internal and external (exam) assessments outlined by the IB. Without completing these, the student will not earn credit for the course. Students will have to pay the examination fee in year two of the course. It is approximately \$175 per exam.

IB DP courses are assessed on level 1-7 scale. Advanced post-secondary credit may be granted if the student earns a high enough level in the Higher Level (HL) courses. Standard Level (SL) courses are not eligible for post-secondary advanced credit. Students must consult the post-secondary institution of choice to find out what the minimum level is to earn advanced-credit in the course of interest.

Students should consult the IB Diploma Programme Coordinator with any questions about the Course Candidate option.

IB DP Course Offerings

See descriptions for each course under the appropriate departments.

<p>Group 1: Studies in Language & Literature (see English department section for course descriptions)</p> <ul style="list-style-type: none">• Language A: IB Language & Literature SL• Language A: IB Literature HL	<p>Group 4: Science (see Science department section for course descriptions)</p> <ul style="list-style-type: none">• IB Biology SL• IB Biology HL• IB Physics HL• IB Chemistry SL• IB Chemistry HL• IB Computer Science HL
<p>Group 2: Language Acquisition (see Languages department section for course descriptions)</p> <ul style="list-style-type: none">• Language B: IB French SL• Language B: IB Spanish SL	<p>Group 5: Mathematics (see Math department section for course descriptions)</p> <ul style="list-style-type: none">• IB Math AA SL• IB Math AA HL
<p>Group 3: Individuals & Societies (see Social Studies department section for course descriptions)</p> <ul style="list-style-type: none">• IB History SL• IB History HL• IB Geography SL• IB Geography HL• IB Global Politics SL• IB Global Politics HL	<p>Group 6: The Arts See Arts department section for course descriptions)</p> <ul style="list-style-type: none">• IB Film HL• IB Visual Arts HL

COURSE DESCRIPTIONS

ENGLISH

Creative Writing 11

This course is suitable for all students who have an interest in developing their creative writing skills. This is an academically rigorous English Language Arts course that values language literacy as essential and fundamental to learning, thinking, and communicating. In particular, this course will help develop students' ability to write for self-expression and various creative purposes. Within a supportive community, students will collaborate and develop their skills through writing, design, and work-shopping processes. Students will be encouraged to explore their personal and cultural identities, memories, and stories through a wide range of genres and media. Some examples of genres explored include short fiction and poetry, creative non-fiction, First Peoples oral tradition/culture, and memoir. This course will help to refine academic and professional writing through the teaching of grammar, structures, techniques, conventions, and style. The course will also include critical reading of and responses to a variety of texts including short stories, novels, poetry, and works of non-fiction. Creative Writing 11 is grounded in the deeper exploration and application of writing processes developed in Language and Literature 8-10, inviting students to express themselves creatively as they experiment with, reflect on, extend, and refine their writing to a polished and publishable level. All of these skills will prepare students for the expectations of English Studies 12.

Literary Studies 11

This course is suitable for all students who have an interest in developing their English literacy skills, with a special emphasis in the areas of reading and writing. This is an academically rigorous course that emphasizes a deeper analysis and nuanced inquiry of texts. Within a supportive community, this course will not only help improve reading strategies for comprehensive understanding of a variety of texts, but more importantly, will promote reading for interest and enjoyment. Some examples of texts studied include, World Literature, Feminist Literature, Canadian Literature, First Peoples' texts, specific topic, theme, or inquiry, fiction and non-fiction, and literature by era. Connecting to traditional and new media, online writings, and oral texts will be embedded. This course will also help develop academic and professional writers through the teaching of grammar, structures, techniques, conventions, and style. Some examples of assignments may include essays, journals, blogs, poetry, song lyrics, stories, speeches, debates, and other innovative and creative written expressions. While this course caters to students who show a particular interest in and/or talent for reading and writing, it is also a course for students who may find reading and writing challenging. Through a Focused Literary Studies lens, reading and writing complement each other, strengthening each literacy skill individually and holistically. All these skills will prepare students for the expectations of English Studies 12.

Spoken Language 11

This course is suitable for all students who have an interest in developing their spoken language skills. Through a Spoken Language lens, speaking and writing complement each other, strengthening each literacy skill individually and holistically. Spoken language skills are increasingly necessary in everyday, educational, and professional contexts. Within a supportive community, Spoken Language 11 provides opportunities for students individually and collaboratively to study, create, and use language to produce original pieces in a variety of modes. Examples of using the voice to empower include formal and informal speeches, individual and group presentations, class discussions and debates, dramatizations and readers' theatre, poetry reading/Slam Poetry/spoken word/rap, interviews, First Peoples oral culture/tradition, and multi-social-media platforms such as Podcasts and YouTube. In Spoken Language 11 there is a stronger focus on professional applications such as speech writing/presenting, proposals, interviewing, event facilitation, radio/Podcasts/video posts, and voice-overs. This course is catered to students who show a particular interest in and/or talent for speaking and writing and students who wish to apply these skills in a post-secondary and career setting. It is also for students who seek to strengthen their speaking and writing skills. All these skills will prepare students for the expectations of English 12.

English Studies 12 - Required

English Studies 12 is designed for all students and provides opportunities to refine communications, think critically and creatively about the uses of language, explore texts from a variety of sources, deepen understanding and awareness of ourselves and others, gain insight into the diverse factors that shape identity, appreciate the importance of self-representation through text, contribute to Reconciliation by building greater understanding of the knowledge and perspectives of First Peoples, and expand understanding of what it means to be educated Canadian and global citizens.

IB Language A: Language & Literature SL

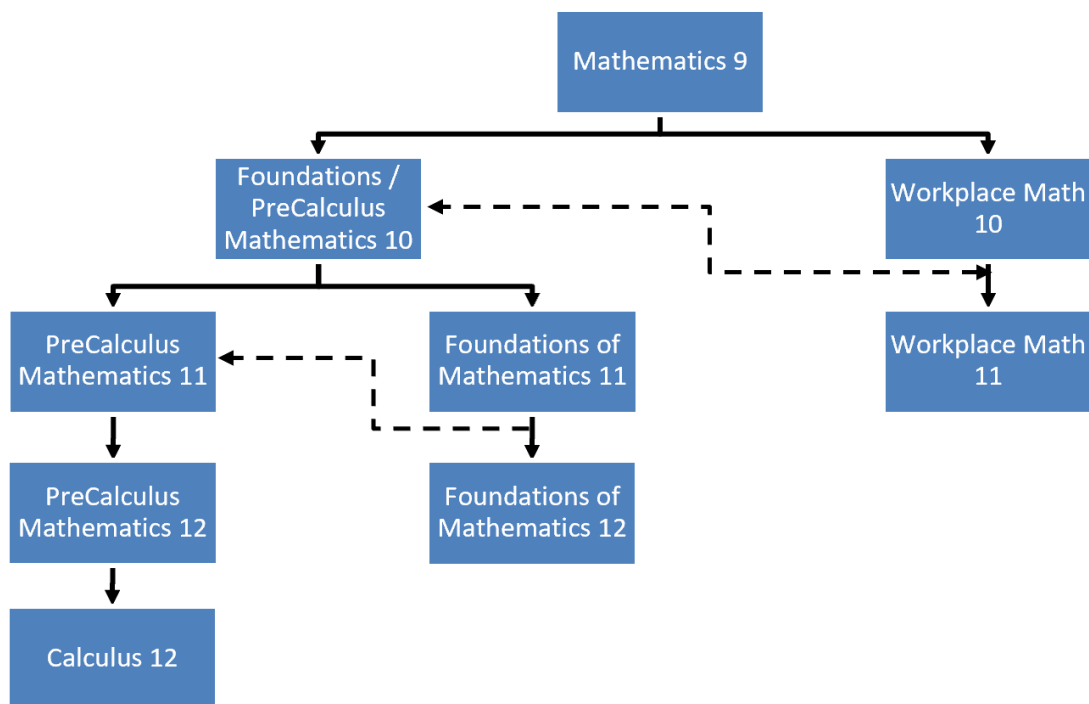
IB Language and Literature (English) introduces students to the investigation of both literary and non literary texts. Students will gain an appreciation of language and literature across our culture and the cultures of other societies. Students explore how language develops in specific contexts, and how it shapes perspective. Students are asked to consider the way language is used in a variety of forms of media, and address how the production and reception of texts is influenced by how they are delivered. Students will also study Literature, and Literature in translation, as the student is challenged to reflect on the role of cultural assumptions in interpretation. Students will develop the ability to reflect critically on their reading while presenting literary analysis powerfully through both oral and written communication. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB Language A: Literature HL

IB Literature (English) is a theme-based course that introduces students to the investigation of literary texts. This course involves a comprehensive exploration of literature from a variety of cultures, genres and periods. The study of literary works in context is emphasized and through the study of literature in translation, the student is challenged to reflect on the role of cultural assumptions in interpretation. Students engage with and learn to appreciate the artistry of literature, and develop the ability to reflect critically on their reading, presenting literary analysis powerfully through both oral and written communication. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

MATHEMATICS

The Mathematics program is designed to provide all students with the opportunity to progress in achieving their intellectual, social, human, and career goals. Students should explore course options, keeping their career objectives in mind, and what courses they will need to fulfill their goals. It is also stressed that both parents and students maintain contact with the math teacher when concerns or questions arise regarding math placement.



Foundations of Mathematics 11

Foundations of Mathematics 11 builds on the skills acquired in Foundations and Pre-Calculus 10 and is designed for students going on to secondary programs where an academic math, but not calculus, is required. Each student must check the requirements of his or her preferred post-secondary program to ensure that Foundations of Mathematics 11 is the appropriate choice. Topics include rates and scale, geometric proofs, systems of linear equations in two variables, quadratic functions, normal distribution, and standard deviation. Assessments include assignments, quizzes, tests and possibly a final exam. A graphing calculator, preferably a T183 or T184, is required. These are available for rent in September if a student chooses this option.

Pre-Calculus 11

Pre-Calculus 11 builds on the skills acquired in Foundations and Pre-Calculus 10 and is particularly designed for those students going into post-secondary programs where Calculus is required. Topics include absolute value functions, radical expressions and equations, factoring polynomials, quadratic functions, linear and quadratic inequalities, arithmetic and geometric sequences, and the Sine and Cosine laws. Assessments include assignments, quizzes, tests, projects and a final exam. A graphing calculator, preferably a T183 or T184, is required. These are available for rent in September if a student chooses this option.

Workplace Math 11

Workplace Math 11 will teach students math they will use in a job or their daily life. Workplace Math 11 is specifically designed for someone who is planning to enter a technical college or a trade school. The apprenticeship math pathway has been designed to provide students with the mathematical understanding and skills needed for entry into the workforce.

Foundations of Mathematics 12

Foundations of Math 12 is intended for students who will be pursuing post-secondary studies in the Arts or a subject in which Calculus will not be taken as part of the program. This course is not required for graduation but may be required for university admission depending on the faculty and program you choose. This course involves the study of puzzles, compound interest and investment portfolios, set theory, probability, polynomials, exponential, logarithmic and sinusoidal functions, as well as a research project involving current events or an area of interest that involves Mathematics.

Pre-Calculus 12

This course is intended for students who will be studying Business, Science, Engineering, or other disciplines in which Calculus is a requirement. This course is not required for graduation but may be required for entry into the faculty or program you will pursue in university. It is also suggested that this course be followed up with Calculus 12 to properly prepare you for university. This course includes the following topics: combinatorics, binomial expansion, composite functions, transformations of graphs, exponential and logarithmic functions, polynomial factoring, radical and rational functions, trigonometry, equations, and identities.

Calculus 12

This course is designed to prepare students for university mathematics. Topics include functions, limits, derivatives, antiderivatives and differential equations. Students who do well in this course may wish to do the University Challenge Exam. Students are **recommended** to have at least a 'B' in Pre-Calculus 12 before attempting this course.

IB Math Analysis & Approaches (AA) SL/HL

Recommended Pre-Calculus 11 (take in summer school, or see counsellor for guidance)

Analysis and Approaches is appropriate for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. Emphasis is on:

- o algebraic methods,
- o developing mathematical thinking skills,
- o and real and abstract mathematical problem solving.

This course caters to students who already possess knowledge of basic mathematical concepts and who are equipped with the skills needed to apply simple mathematical techniques correctly. In this course students will explore real and abstract applications of these ideas with and without the use of technology. This course will cover topics in number, algebra, functions, statistics, probability, trigonometry, geometry, and calculus. Math AA at the HL will cover an advanced level of the topics listed previously. This course is aimed at students who will go on to study subjects with substantial mathematics content, such as chemistry, biology, physics, engineering, business, or economics. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

MODERN LANGUAGES

The principle goal of our language program is to develop communications skills so that students will have the desire and ability to express themselves in real-life situations. Students should be aware that a grade 11 language course is a prerequisite for most universities. A few universities may allow a Beginner Language 11 or require a grade 12 language course. Most college programs do not require a second language.

English Language Development 11

ELD 11 is designed for students with upper beginner English (450). This course continues the development of the four main English language skills of reading, writing, listening, and speaking. English language strategies are expanded to include a wider range of everyday and academic uses. The focus is on reinforcing fundamental English grammar and syntax, while introducing more complex grammar and vocabulary (both social and academic). *Students are placed at the discretion of the ELL teacher/counsellor after English Language assessment.*

French 11

Recommended Prerequisite: French 10. Students will interact with growing confidence in French. Grammar becomes more complex and is used as a tool to help students communicate in an effective and more sophisticated manner. The themes encountered in French 11 are cuisine, childhood, publicity and dealing with stress. Students will learn about the topics themselves as well as learning the French needed for practical communication about the topics. Successful completion of French 11 provides the minimum language requirement for most universities.

French 12

Recommended Prerequisite: French 11. This course is the culmination of the study of French language and culture at the secondary level. More complex facets of language and literature are introduced. French culture is explored in greater detail. The themes that are studied are: French art, artists, culture, travel, self-esteem and plans for the future. As in grade 11, students are learning about the topics themselves as well as learning the French needed for practical communication about the topic.

IB Language B: French SL

Pre-requisite: French 10

In IB French, students develop their language skills with a long-term view to functional bilingualism. The course is built around aspects of three Core Themes: Communication & Media, Global Issues and Social Relationships. There is also a choice of two Optional themes to be explored: Customs & Traditions, Cultural Diversity, Leisure, Health and Science & Technology. Students will seek understanding of other languages and cultures, as they explore these themes particularly as they relate to French-speaking countries. Course-related projects, interactive activities and readings will provide opportunities to develop cultural awareness as well as provide significant language development. This is an IB DP course. Students must complete both years of the course and the external examination to receive course credit.

Spanish 11

Students will interact with growing confidence in Spanish and will be able to use Spanish resources for research. Grammar becomes more complex to help students effectively communicate in speaking and writing. The themes include travel preparations, past events, describing people and events, and asking for directions. Successful completion of Spanish 11 provides the minimum language requirement for most universities.

Spanish 12

This course is the culmination of the study of Spanish language and culture at the secondary level. More complex facets of language and literature are introduced. Students will encounter different aspects of Latin American life, language, history, customs, and traditions from Spain, Western United States, the Dominican Republic, and Ecuador. Themes include describing food, ordering at a restaurant and healthy eating, talking about movies and how they affect us, describing future plans, school related issues, and family relationships.

IB Language B: Spanish SL

Pre-requisite: Spanish 10

In IB Spanish, students develop their language skills with a long-term view to functional bilingualism. The course is built around aspects of three Core Themes: Communication & Media, Global Issues and Social Relationships. There is also a choice of two Optional themes to be explored: Customs & Traditions, Cultural Diversity, Leisure, Health and Science & Technology. Students will seek understanding of other languages and cultures, as they explore these themes particularly as they relate to Spanish-speaking countries. Course-related projects, interactive activities and readings will provide opportunities to develop cultural awareness as well as provide significant language development. This is an IB DP course. Students must complete both years of the course and the external examination to receive course credit.

PHYSICAL EDUCATION

Active Living 11/12

The Active Living 11 course is an elective course that is open to Grade 11 students. Formerly titled PE 12, Active Living 12 is designed as an extension of Active Living 11. Through participation in physical education, students will develop the knowledge, skills, and attitudes necessary to incorporate physical activity into regular routines and leisure pursuits to live an active, healthy lifestyle. *Course Content:*

- *Performance-Oriented Activities:* Team and individual games, and physical fitness.
- *Leisure-Oriented Activities:* Activities may include golf, cycling, racquetball, bowling, pool, hiking, curling, rock climbing, windsurfing, dance, swimming, aerobics, and skating.
- *Active Health:* These activities will provide opportunities to acquire skills and knowledge necessary to develop an active and healthy lifestyle. Activities may include aerobics, fitness testing, and assignments.
- *Personal Development:* These activities will provide opportunities to understand and appreciate the nature of leadership.

A variety of assessment methods may be used when evaluating students. Examples include: Participation records, checklists, self-assessment tools, journal writing, examination, skill testing, fitness testing, projects, goal setting exercises, etc.

Fitness and Conditioning 11/12

Fitness and Conditioning 11/12 is designed to provide students an opportunity to focus on well-rounded training programs, working towards a personal goal. Students will receive knowledge and practice of the following components of fitness: cardiovascular endurance, muscular strength & endurance, power, core strength, and body composition. Students will learn to independently develop training and nutritional programs based on specific goal-setting, training principles, periodization, and nutrition education.

SCIENCE

Anatomy & Physiology 12

Anatomy and Physiology 12 (Previously Biology 12) is a course intended for those students who are interested in preparing themselves for post-secondary studies in the biological sciences or health services. This course concentrates on the anatomy and physiology of human body systems. The topics of biochemistry, cells, and cellular processes lead to the study of the organ systems in humans.

Chemistry 11

Recommended: Science 10 and Pre-Calculus/Foundations 10 (C+ average or better). Chemistry 11 is an interesting and challenging course that builds on concepts and skills developed in Science 8-10. The course begins with an in-depth study of matter, the periodic table, atomic theory, and the structure of atoms and molecules. The mole concept, chemical reactions, stoichiometry, solutions, and an introduction to organic chemistry are then studied in detail. As there is an emphasis on problem solving, students entering Chemistry 11 should have good Math skills.

Chemistry 12

Prerequisite: Chemistry 11 (Recommended: minimum C+ standing). This course is intended for those students who have shown an aptitude for Chemistry and plan to take Chemistry and related courses at the post-secondary level. Chemistry 12 is a problem-centered course involving more advanced concepts than Chemistry 11. The topics covered: Reaction Kinetics, Equilibrium, Solubility of Ionic Substances, Acids, Bases and Salts, and Oxidation reduction.

Environmental Science 11

In this course you will investigate the interconnectedness within ecosystems; where every part plays a role, is related and can affect each other. You will learn about the different types of ecosystems found within our local environments, develop an understanding of the natural world through studying animal behaviour and plant life and visit natural habitats and ecosystems. Through outdoor field studies and data collection, you will question why things are happening in the natural world and learn about the relationships of organisms to one another and to their physical environments.

Life Science 11

Life Sciences 11 (Previously Biology 11) is designed to help students explore the concepts of Evolution and the Diversity of Life. The course begins with a study of evolutionary theory and then explores a representative sample of organisms ranging from the simplest to the complex. The students will study the diversity of life in the units of microbiology, plant and animal biology. Some organisms will be studied in detail. Students will develop basic lab skills such as animal dissection and the use of the compound microscope.

Physics 11

Recommended: Science 10 and Pre-Calculus/Foundations 10 (C+ average or better). Physics 11 is an introductory course with an emphasis on problem solving, data collection, and interpretation. The main topics are motion in one dimension, energy, forces, and wave phenomenon. Physics 11 is recommended for all students who wish to pursue academic studies or career training in scientific, technical, and medical fields.

Physics 12

Prerequisite: Physics 11 (Recommended: minimum C+ standing). Physics 12 is recommended as a follow-up physics course suitable for students who have a particular interest in Physics or who plan to continue in science or engineering. The course covers: Vector Kinematics, Vector Dynamics Energy, Vector Momentum, Circular Motion, Gravitation, Electrostatics, Circuitry, Electromagnetism and Special Relativity. *Evaluation* is based on lab work, assignments, quizzes and exams.

Science for Citizens 11

Science for Citizens 11 provides students with credit for a Science 11 course. The focus of the course is on real world, practical applications of science. The big ideas in this course are: how scientific processes and knowledge inform our decisions and impact our daily life; how scientific knowledge can be used to develop procedures, techniques and technologies that have implications for places of employment; and how scientific understanding enables humans to respond and adapt to changes locally and globally.

IB Biology SL/HL

In IB Biology, students aim to question, investigate, and understand the living world at all levels using many different approaches and techniques. In year one, students explore molecular biology, the cell, genetics, evolution, ecology and biodiversity. In year two, students further their understanding of the interconnectedness of the living world through the study of metabolism, human physiology and plant biology. Students have opportunities to design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers and evaluate and communicate their findings. The nature of science, as an overarching theme, will allow students to appreciate the global context of scientific study. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB Physics HL

This course provides students with an understanding of the dual nature of Physics both theoretical and practical as well as it will increase their command of the use of Mathematics as the language of Physics. This course will explore concepts ranging from Newtonian mechanics up to modern Physics; it has a heavy emphasis on laboratory work as an integral part of the learning process. A main objective is to challenge students to think about and analyze how physical principles have been applied to construct and alter our material world to suit our needs. This raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists. Students will also explore the international context within which physics exists and examine issues from more than one side. Other topics include: Kinematics, Dynamics, Momentum, Energy, Circular Motion, Thermal Energy, Atomic theory, Waves, Optics. Students will complete a portfolio of investigations that includes an extended experiment. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB Chemistry SL/HL

This course will introduce scientific techniques for Measurement and Data Processing. We will explore Stoichiometric Relationships, Atomic Structure, trends in Periodicity, Chemical Bonding, Energetics, Chemical Kinetics, Equilibrium, Acids and Bases, Electrochemistry and Organic Chemistry. IB Chemistry combines academic study and the development of practical and investigational skills. Students will use the scientific method, developing and testing hypotheses, critically analyzing their results, and concluding based on their experimental data. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB Computer Science HL

The IB Computer Science course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, enables and empowers innovation, exploration and the acquisition of further knowledge in a diverse set of topics: computer hardware and networking, system management, computational thinking, and the fundamentals of programming and data management. Students also study how computer science interacts with and influences cultures and society as well as the ethical issues surrounding computer science's impacts on our world. During the course the student will also develop technical skills in the field of computer science by reviewing, reproducing, and creating algorithms and software using the Java programming language. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

SOCIAL STUDIES

Social Studies is a multidisciplinary subject that draws from the social sciences and humanities to study human interaction with natural and social environments. The overall goal of Social Studies is to develop thoughtful, responsible, active citizens who can consider multiple perspectives and to make reasoned judgments. The curriculum provides students with opportunities as future citizens to critically reflect upon events and issues in order to examine the present, make connections with the past, and consider the future.

All senior Social Studies are open to Grade 11 and 12 students. Students may take as many senior Social Studies classes as they wish. Students who might decide to pursue post-secondary education in Arts and Social Sciences (anthropology, behavioural neuroscience, cognitive science, criminology, economics, English, First Nations Studies, French, gender, sexuality and women's studies, history, humanities, international studies, labour studies, Language Explorations, literature, philosophy, political science, psychology, sociology, world literature) are strongly encouraged to **take two or more** of the courses below.

All Senior Social Studies courses give students opportunities for discussion and debate, inquiry and research, academic writing and citation, and primary and secondary source analysis. Students can expect to work independently and in small groups. Methods of assessment include debates, discussions, quizzes and tests, written assignments, presentations, and inquiry research projects.

20th Century World History 12

20th Century World History 12 examines world history from 1900 to present, including the proliferation of technology, the role of nationalism, the breakdown of empires and creation of new economic and political systems.

Economic Theory 12

Economic Theory 12 examines the theories and systems that drive global political, social, and economic decisions, including by studying past economic conditions, competing theories, and ethical issues in economics.

Genocide Studies 12

Genocide Studies 12 examines historical atrocities and their progression, including their political, social, and cultural impacts and how violence against targeted groups can be resisted today to mitigate challenges to global peace and prosperity. Warning: This course covers content that may be emotionally difficult for some students.

Human Geography 12

Human Geography 12 examines global human populations and their relationships with the land, including population growth, cultural development, physical features and natural resources, climate change, and human impacts on the environment.

Law Studies 12

Law Studies 12 examines the role of the law and interpretation of the law in society and its impacts on the lives of citizens, including how active citizens can impact the law and how changes in the law evolve over time.

Philosophy 12

Philosophy 12 examines big questions about the nature of knowledge, reality, society, morality, and art by providing tools for investigating meaning through examining beliefs, ways of thinking, logic, and reasoning. The course is primarily based on analyzing opinions and theories of philosophers and learning how to articulate your own.

Social Justice 12

Social Justice 12 examines the causes of social injustice and their impacts on society as well as how social justice initiatives can transform individuals and systems, including how our worldviews can shape and inform how we view social justice issues.

IB Global Politics SL/HL

Global Politics is about the study of power— those who have it, and how they use it to influence the global society. The 21st century is characterized by rapid change and increasing interconnectedness, impacting individuals and societies in unprecedented ways and creating complex global political challenges. Global politics is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. Core topics include: types of power, political theories, peace and conflict, international development, and international relations. In the course, students examine case studies on current events like: equality, poverty, climate change, sustainability, terrorism, and more. Students in this course will develop an understanding of the local, national, international and global dimensions of political activity, as well as explore political issues affecting their own lives. The study of global politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB History SL/HL

IB History is a global history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical inquiry skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. Topics include: Industrialization, The Move to Global War, The Great Depression, The Cold War (SL), and The Americas and Its Political Development since 1960 (HL). This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB Geography SL/HL

IB Geography is a course that revolves around the themes of population change, climate change, resource management and environmental sustainability. The theme of population involves an examination of past, current, and future trends in areas such as distribution, fertility, mortality, disease, migration, and age structure. The theme of climate change entails the study of the causes of, impacts of and responses to global temperature shifts. The themes of environmental sustainability and resource management examine patterns of resource production, consumption, availability, distribution, and trade, as well as the impacts of these activities on the environment. Special topics include: living in urban environments, geophysical hazards (like earthquakes and volcanoes), and food and human health. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

APPLIED DESIGN, SKILLS & TECHNOLOGIES (ADST)

The Applied Design, Skills & Technology (ADST) courses available are:

DIGITAL DESIGN

- AP Computer Science 12
- Computer Programming 11/12
- Game/App Development 12
- Digital Media Design 11/12
- Graphic Production 11/12
- Digital Audio Production 11/12

BUSINESS EDUCATION

- Accounting 11
- Marketing/Promotion 11
- Tourism 11/12

CULINARY

- Culinary Arts 11/12
- Culinary Arts Advanced Skills 11/12

HOME ECONOMICS

- Child Dev. & Caregiving 12
- Food Studies 11/12
- Psychology 11/12
- Textiles 11/12

PRODUCT DESIGN

- Automotive Technology 11/12
- Drafting/Design 11/12
- Robotics 11/12
- Woodwork 11/12

PRODUCT DESIGN

Automotive Technology 11/12

This course is excellent for the 'do it yourself' but is designed for students interested in 'trades' related careers. Professionalism is the goal. Good trades people make good money! Grade 12 students will attain more experience and are expected to take their learning to a higher level from grade 11. Objective is to initiate or enhance student's knowledge, understanding and skills relating to automobiles, related industries and trades; and to initiate an appreciation and understanding of the implications regarding the use of automobiles. There is a high demand for skilled workers in trades and technologies!

Areas to be explored include: careers, tools, safety, healthy work practices; emerging and alternative energy systems and their impact on society; how to access and apply information; engine types; serviced and inspection procedures; application of fasteners and fittings; recycling procedures; wheel and tire inspection, rotation, repair, mounting and balancing; automotive systems; test industries; preventative maintenance; brake systems; general electricity, batteries, charging, starting, ignition and electrical systems; fuel systems; and emission systems. Practical work will be as extensive as possible. Students are encouraged to propose projects which relate to their interests, needs and abilities. There can be no set curriculum for practical work due to the variety of vehicle problems we encounter. However students who spend time working in an automotive shops, 'turning wrenches' and problem solving, will become good at their chosen trade.

Woodwork 11

The main objective of this course is to offer a combination of knowledge and "hands-on" skills that will prove valuable over a lifetime as well as opening doors to a variety of career options. The areas of focus will include a blending of safety, measurement, theory, tools and equipment, and materials and processes with an emphasis on the fabrication of wood related products. Students will apply the acquired skills in the design and construction of teacher/student selected projects.

Woodwork 12

Recommended Prerequisite: Woodwork 11. The main objective of this course is to offer an advanced combination of knowledge and “hands-on” skills that will build on previous experience in woodwork. The area so focus will include a blending of safety, measurement, theory, tools and equipment, and materials and processes with an emphasis on the fabrication of wood related products. Students will apply the acquired skills in the design and construction of advanced teacher/student selected projects. Post-secondary and career options are explored in the related subject areas.

Drafting & Design 11

The Drafting and Design program allows students to experience the most up-to-date software that is currently being used in industry. The course is modular and all students will undertake three compulsory disciplines:

- 1) Traditional Drafting using drawing instruments.
- 2) The use of AutoCAD software which allows students to design, visualize, and document ideas clearly and efficiently. The program is a powerful 3D modeling tool with robust documentation and visualization tools. The software provides the power and flexibility to work more productively from concept through completion.
- 3) Design projects which will enable students to work through the Design Process to design and manufacture artifacts. The projects will be realized through the use of the school workshops and will necessitate the correct and safe usage of tools and machinery.

Students will also choose one of the following modules:

- 1) Explore the use of Autodesk Inventor 3D mechanical design software which provides a comprehensive set of 3D mechanical CAD tools for producing, validating, and documenting complete digital prototypes. The Inventor model is a 3D digital prototype that helps users visualize, simulate, and analyze how a design will work under real-world conditions before a product or part is ever built.
- 2) Revit Architecture building design software which is purpose-built for building information modeling (BIM), key for sustainable design. When design changes are made it is automatically coordinated throughout the project and designs and documentation stay consistent and complete.
- 3) Stunning 3D animations can be produced with Autodesk 3ds Max software. This full-featured 3D modeling, animation, rendering, and effects solution is used to produce top-selling games and award-winning film and video content. Those looking to quickly and efficiently generate convincing characters, seamless CG effects, or jaw-dropping games will want to explore this latest release of the software.

Drafting & Design 12

Recommended Prerequisite: Drafting and Design 11. The main objective of this course is to offer an advanced set of skills and knowledge that will provide valuable over a lifetime as well as opening doors to a variety of career options. The areas of focus will include a blending of conventional board drawing, measurement, and a variety of software applications, primarily AutoCAD with a further emphasis on architectural and mechanical drawings. Students will apply the acquired skills in the design and drawing of teacher/student selected projects which could serve a portfolio for post-secondary entrance or to career exploration. Scale models may also be created.

Robotics 11/12

This course will directly focused on robotics and their design and operation. Students will work both as an individual and in groups creating programmable robots to accomplish tasks/challenges in the classroom and the real world. Students will learn about interaction of robotic subsystems; how structure and power relate to motion; how sensors and control relate to logic; developments in robotic technology; similarities and differences between radio-controlled and autonomous robots; programming related to microcontrollers. Students will also expand their knowledge of electronics while building more complex and advanced projects. Building upon electronics basics, students will explore advanced topics of designing electronic projects involving higher-level programming and construction. Programming skills will be improved and the use of Micro-processors and motor control circuits will be utilized. Projects will be based to have the students solve problems and have their projects react and respond to various environments. In this course, students will have the opportunity build autonomous and remote controlled robots, and other programmable circuits. Selected students may become involved in the school's Robotics Club and competitions.

DIGITAL DESIGN

Game & App Development 12

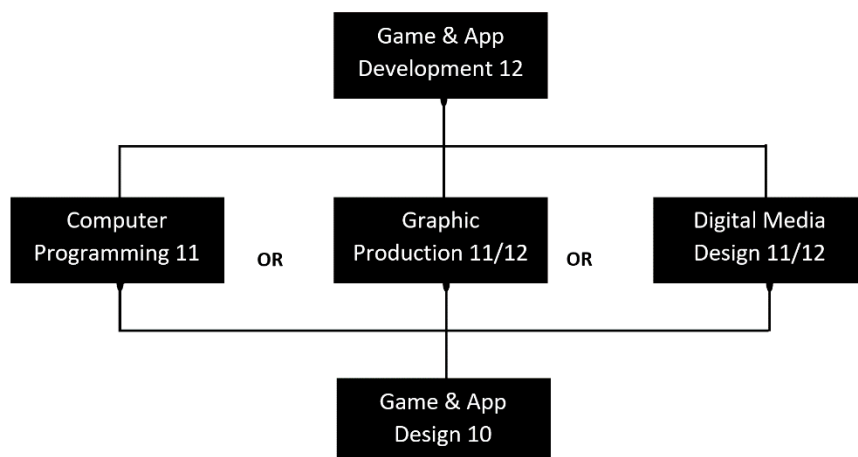
*Recommended Prerequisite: Computer Programming 11 **or** Graphic Production 11/12 **or** Digital Media Design 11/12*

Do you want to push your skills in programming or graphic production to the next level? Do you have a passion for game and app design? Do you want to get a taste for real-world development processes? In “Game and App Development 12” you will be working in a project-based learning environment to develop custom games and/or apps. You will work individually as well as collaborate in teams on large-scale projects to developing skills in self-chosen specializations and create products that harness your new learning alongside the unique skills you bring to the course. You will also get opportunities to create experiences of your own design and imagination to play and share with others!

Coding languages covered: C#

Development software: Unity, Microsoft Visual Studio

Visual design programs used: Adobe Suite (Photoshop, Illustrator, AfterEffects, Premiere Pro), Blender



Computer Programming 11

Prerequisites: None

Computer Programming 11 is a course for students who have a strong interest in learning how to code! Students will develop beginner to intermediate skills in problem solving, program design, structured programming, and coding fundamentals while building software and 2D videogames. The course is project-based, meaning all core content is learned and assessed by actually creating working pieces of software! This course is a prerequisite for all computer programming options at the grade 12 level. *This course also qualifies you to take Game and App Development 12.*

Coding languages covered: Java

Software used: Greenfoot, NetBeans

Computer Programming 12

Recommended Prerequisite Course: Computer Programming 11

Computer Programming 12 is a course for students interested in deepening their technical fluency in and conceptual understanding of computer programming through a project-based learning approach. Students will expand upon their learning in Computer Programming 11 by studying more advanced skills, algorithms, and techniques for developing software both individually and in teams using Java, Python, or a combination of both! Students will also be able to explore self-chosen topics in the field to extend their learning through self-directed explorations.

Coding languages covered: Java, Python

Software used: NetBeans, PyCharm

AP Computer Science 12

*Recommended Prerequisite: Computer Programming 11 **highly recommended***

AP Computer Science 12 is a course for students interested in digging deep into the technical side of computer programming. It is a fast-paced and intensive course that takes students from absolute beginners to skilled practitioners of the Java programming language. It emphasizes object-oriented programming methodology in Java and focuses on problem solving and algorithm development. It is meant to be the equivalent of a first-semester course in computer science at post-secondary. Students who successfully complete the AP Computer Science Exam can use this course credit at the post-secondary institution of their choice.

Software used: NetBeans

Digital Media Design 11/12

Prerequisite Course: None

Students in Senior Digital Media Design will develop 3D worlds, characters, and animations, explore film and audio, or build and maintain functional websites. After an initial exploration of each topic, you will select one of the following pathways to focus on:

- 3D Modelling and Animation: you will use Blender to create video game assets, environments, characters, and digital short films
- Video Production: you will use Adobe Premiere and After Effects to storyboard, film, edit, and produce short movies.
- Web Development: you will develop web pages by investigating HTML, CSS, JavaScript, and Python, and learn to maintain it using industry standard frameworks

Advanced students will be given opportunities to **self-direct** their own exploration on topics of interest and/or need to enrich their learning and create products that solve real-world challenges.

Graphic Production (and Yearbook) 11/12

Prerequisite Course: None

Students in senior Graphic Production will engage in design production opportunities, which can include:

- Working collaboratively in a small, focused team to plan, build, and publish the school's **yearbook**
- Investigating digital technologies used for developing products for a variety of different mediums like video, photography, and digital artwork
- Building and adapting graphic products for a range of mediums from traditional still images to online streaming video

Advanced students will be given opportunities to **self-direct** their own exploration on topics of interest and/or need to enrich their learning and create products that solve real-world challenges.

Note: Students interested in Yearbook should take this course in both semesters in order to fully complete the book.

Digital Audio Production 11/12

Prerequisite Course: None

Digital Audio Production 11/12 is a course for students who want to learn about the innovative and exciting field of sound design and how sound is integrated in a wide variety of modern media. Students will learn how to produce music, sound effects, and live audio recordings and mixes, as well as how to use industry standard production equipment to capture, edit and master audio tracks. They will be able to apply their learning to a variety of media such as film, video games, and web content as well as have the opportunity to produce professional music recordings. No pre-requisites or ability to read music required!

Software used: Digital Audio Workspace (DAW), Adobe Audition, Adobe Premiere Pro

CULINARY ARTS

Students of Culinary Arts 11 and 12 can apply their skills in their homes as well as in public food-service facilities. They often choose to use their training to secure entry-level employment in the growing hospitality industry or to pursue careers in the food industry.

Culinary Arts 11

Culinary Arts 11 focuses on quantity food preparation and service. Students develop the skills necessary for commercial food preparation as they participate in activities related to receiving, storing, and presenting nutritious foods. Students also have opportunities to develop attitudes required by food-service professionals and to practice customer service. Students consider their own and their customer's safety while handling equipment and supplies, managing the working environment, and preventing food-borne illnesses. As they experience the creative preparation and presentation of food, they build an awareness of its social and cultural significance. Students also gain a basic understanding of the economics of operating a food-related enterprise, including purchasing, cost accounting and portion control.

Culinary Arts 12

Recommended Prerequisite: Culinary Arts 11.

Culinary Arts 12 is a continuation of Culinary Arts 11, but with a different theory component. All students are marked on practical and theory knowledge and a major term project.

Culinary Arts 11 - Advanced

Recommended Prerequisite: Culinary Arts 11 and 12.

This course builds on the knowledge base and skills developed in Culinary Arts 11 and 12. Students will continue to work with a variety of food products and engage in special projects such as catering, special events and participating in food competitions. Students will also be introduced to aesthetics, presentation and marketing of food products. In addition, students will continue to build practical and fine motor skills understanding the ergonomics of the kitchen and the efficient use of movement in the workplace.

Culinary Arts 12 - Advanced

Recommended Prerequisite: Culinary Arts 11 and 12, Culinary Arts 11 - Advanced.

This is an advanced course designed for those students who have completed Culinary Arts 11 and 12 and have a strong interest in the food industry. The course will focus on advanced techniques in food study and preparation with an emphasis on careers in the food and hospitality industries. There will be a leadership role expected from students.

HOME ECONOMICS

The Home Economics courses available at Johnston Heights are listed below and include Child Development, Food Studies, Psychology and Textiles courses.

Child Development and Caregiving 12

Formerly offered as Sociology 11. Child Development and Caregiving 12 is the study of societies and human relationships. The focus of this course is on families and their role in society. Units covered include:

- child development from 0 – 12 yrs.
- parenting styles & attachment
- social trends and issues influencing families
- pregnancy, child birth & infant care

Foods Studies 11

Prerequisite: None. This course has a practical orientation to give the students skills needed for life, exploring baking basics, advanced yeast breads, nutrition, meats and alternatives, safety and sanitation and full meal preparation. Learn how to prepare nutritious snacks and healthy meals for a fast-paced lifestyle. Highlights include:

- loaf of bread and cinnamon buns, and braided apple strudel
- handmade pastas – ravioli, fettuccini, cavatelli
- experiment to explore the “Why’s” of baking and food preparation
- Exploring international cuisine

The course also explores the following big ideas:

- Services and products can be designed through consultation and collaboration.
- Personal design interests require the evaluation and refinement of skills.
- Tools and technologies can be adapted for specific purposes.

Foods Studies 12

Prerequisite: None. Foods and Nutrition 12 will prepare you for life beyond Grade 12, a career in Food Studies, Nutrition, Chef, Cook and Teacher. Beyond the Basics! Foods and Nutrition 12 is for the gourmet in you! Select many of your own food preferences. Develop your skills in planning, preparing and presenting foods. This course emphasizes healthy lifestyles and consumer-wise shopping strategies. Highlights of the Semester includes:

- Healthy menu planning
- Advanced baking yeast breads, puff pastry, sourdough, potpie
- International meals
- Advanced skill development: candy making, pasta making, pastries
- Hors d’oeuvres
- Nutrition and special diets

The course also explores the following big ideas:

- Services and products can be designed through consultation and collaboration.
- Personal design interests require the evaluation and refinement of skills.
- Tools and technologies can be adapted for specific purposes.

Psychology 11

Psychology 11 presents a solid foundation of the field, commonly defined as the science of human behavior and experience. The course examines an array of major theories and looks at how they impact understanding of our own development and various phenomena. Covered topics include:

- child / adolescent psychology
- nurture / attachment
- learning / motivation
- nutrition and its impact on thought and behaviour
- brain anatomy / function
- neurological disorders

Psychology 12

Psychology 12 builds on the knowledge and tools gained in Psychology 11 (Psychology 11 is *not* a prerequisite). The course applies theories about human behavior and mental processes across contexts, both personal and public. It is a comprehensive, introductory course designed with university or college-bound students in mind. Highlights of the semester include:

- love and attraction
- group psychology / herding behaviour
- altruism / happiness
- local and global issues/developments in Psychology
- stress and its impact on health
- crime trends / anti-social behaviour
- mental health / illness
- careers in Psychology

Textiles 11

Awaken your creativity! Feel the pride of accomplishment of your unique and personalized design. Basic sewing skills are an asset but are not mandatory. You will also learn more advanced sewing techniques and more difficult commercial patterns used in the industry. Study figure shape analysis, colour and design, styles, features, and history. Students will supply fabric, patterns, and notions. Skills learned may open windows to possible careers in fashion marketing or design.

Textiles 12

Sew, Sew, Sew – Highlights of the semester include:

- make many garments of your choice
- design your own fall or spring line of clothing
- special skills, techniques and equipment will be used

BUSINESS EDUCATION

Accounting 11

Prerequisite: None.

Don't wait until college, university or a financial crisis to study accounting! A secondary school credit in accounting will give you a strong head start for any future studies or for managing your own finances. The basic course covers the full accounting cycle for individuals with little or no accounting background. Topics include an introduction to accounting theory; traditional record keeping procedures; the accounting cycle; special journals; cash; investments and receivables.

Tourism 11/12

Tourism 11/12 represents a comprehensive introduction to a fast-paced, rapidly changing, and extremely diversified industry. Core elements of the program are therefore designed to encourage students to apply, and refine, a wide range of attitudes, skills, and knowledge. The inclusion of Tourism Essentials provides students with both transferable skills and employability skills and a foundation for workplace training in any of the five sectors of the tourism industry.

Marketing & Promotion 11

Ever wanted to design your own store? Ever wondered how an item is priced? Where market surveys come from and who designs them? What is the best way to promote a product? Does advertising really work? What is the best way to sell a product? Could you design the packaging for a new product?? Sign up for Marketing 11 and get the answers to all these questions and more. This project based course covers the marketing essentials that make up the world of marketing. Explore your favorite area of marketing through various group projects. Areas include Fashion, Retailing, Hospitality & Tourism and Sports & Entertainment.

ARTS

The Arts courses available at Johnston Heights are categorized into Performing Arts, Music, and Visual Arts courses.

PERFORMING ARTS

Dance 11/12

This course is an introductory technique course for beginner dancers that gives an overview of dance fundamentals across many genres. Students will study space and movement, the history and culture surrounding various genres of dance, and basic choreography skills. Students will engage in both sides of dance as choreographer and dancer. This course is intended to maximize student creativity, collaboration, and confidence by providing a safe space for students to explore new methods of artistic expression.

Dance Company 10-12 * Block X (Outside timetable)

Required: Teacher Permission. Dance Company members need to audition to be considered for this after-school class.

This course is appropriate for those with a strong work ethic and previous dance experience either at school and/or at a studio. In this performance-based class, dancers will be improving their technique and creating choreography for the stage. There will be multiple workshop and performance opportunities.

Dance Choreography 11/12

Required: Teacher Permission. Please speak with Ms. Leung directly prior to selecting this course. This course is designed for student choreographers and those advanced level dancers who want to work towards mentoring students and create group choreography for the stage. Students will be assigned to a class to act as peer tutors and learn to create dynamic pieces for stage, using their choreography, cleaning, and planning skills.

Drama 11: Acting

Drama 11 is dedicated to the study of the art of stage acting. In a dynamic and safe environment, students will inquire into the Big Ideas of art education: individual and collective expression, dynamic ways of exploring one's identity and sense of belonging, how to grow as a performing artist through perseverance, resilience, and reflection, how to effect change in the actor, audience, and environment, and how to develop creativity, innovation, and collaboration by encouraging original solutions to problems. In every unit of this course, students will develop performance skills of voice, movement, improv, and character/scene study. Students will develop and improve their communication skills, self-confidence, and teamwork abilities along with their performance skills. Students will deepen their collaborative skills to create group and solo performances inspired by theatre history, mask, clown, theatre sports, scripted scenes and monologues, and devised creations.

Drama 12: Acting

Recommended: Drama 11: Acting

Drama 12: Acting is an in-depth exploration of the art of stage acting, building on the concepts explored in Acting 11. Students will be involved in theatre projects centered on the creation of complex characters, demonstrating both depth of intellect and a mature emotional tone. A further focus will be developing an understanding of the main periods in the history of theatre and the literature that supported them, as well as gaining knowledge of Canadian theatre and its implications in modern culture. Through scripted and original work, students will develop and improve their communication skills, self-confidence and teamwork abilities along with their performance skills. Most performances will be done in-class in front of an invited audience. Student actors will also work closely in a creative relationship with student directors towards producing both scripted and original one-act plays.

Directing & Scriptwriting Development 11 & 12

Are you an aspiring writer? Do you have a vision of how a performance should look and sound? In directing and scriptwriting, students inquire into the role of playwrights and directors and the relationship between them. We explore a variety of voices, styles, and perspectives through dialogue, movement, and design. Students will write and direct with an intended audience or message in mind.

Theatre Company 11 *Block X (Outside timetable)

Required: Teacher Permission Theatre Company 11 is a dynamic after-school class based on the model of a professional theatre company and produces a full and varied season of theatre each year. Students must prepare a monologue and audition for roles. Actors embark on a rigorous rehearsal process that ends with a week-long show run. Character, voice, movement, and script analyses are the focus for each performer. Students work closely with director, stage manager, and designers to create our shows. JHTC's structure relies on 4 core values: teamwork, enthusiasm, commitment, and excellence. Students must be available after school two days a week, and then more leading up to our performance week.

Theatre Company 12 *Block X (Outside timetable)

Required: Teacher Permission Theatre Company 12 is a dynamic after-school class based on the model of a professional theatre company and produces a full and varied season of theatre each year. Students must prepare a monologue and audition for roles. Actors embark on a rigorous rehearsal process that ends with a week-long show run. Character, voice, movement, and script analyses are the focus for each performer. Students work closely with director, stage manager, and designers to create our shows. JHTC's structure relies on 4 core values: teamwork, enthusiasm, commitment, and excellence. Students must be available after school two days a week, and then more leading up to our performance week.

Theatre Production 11 & 12 *Block X (Outside timetable)

Theatre Production includes stage management, set design and construction, costume design, lighting design, and sound design. Students work in crews led by their peers to create the aesthetic of our school productions. Theatre Production is a high energy class and students must be responsible and able to work independently as well as under direct supervision of the teacher. This class requires students to have a strong work ethic and to invest in the values of the program: Teamwork, Enthusiasm, Commitment and Excellence! If you are seeking experience in the behind scenes world of Theatre, this is the class for you! Theatre production is a great introduction to employment in Theatre or Film. Students must be available afterschool two days a week, and for the full duration of our show weeks.

IB Film HL

The creation, presentation and study of film requires courage, passion and curiosity: courage to create individually and as part of a team, to explore ideas through action and harness the imagination, and to experiment; passion to communicate and to act communally, and to research and formulate ideas eloquently; curiosity about self and others and the world, about different traditions, techniques and knowledge, about the past and the future, and about the limitless possibilities of human expression through the art form. At the core of the course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement and imaginative synthesis that is achieved through practical engagement in the art and craft of film. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

IB VISUAL ART SL/HL

The IB Visual Arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. This is a two-year IB DP course. Students must complete both years of the course and the external examination to receive course credit.

MUSIC

Senior Concert Band (Grade 11-12)

Recommended Prerequisites: Successful completion of Band 8/9/10 or the teacher's permission, based on an interview to determine current level of achievement. This course is designed for students who have reached an intermediate level of proficiency with a concert band instrument. Senior Band will expand on the same musical skills learned in Band 8-10 with more of a focus on ensemble unity. Students will tackle a wide selection of music at a level that is more fun and challenging than junior years. The class is taught yearlong inside the regular school schedule. There will be performances in school, at festivals, and potentially an overnight field trip. Limited instruments are available for rental from the school (\$120 for the year).

Senior Concert Choir (Grade 11-12) *Block X (Outside timetable)

Students will have the opportunity to develop their vocal skills and music theory through studying and performing a wide variety of music from classical to pop. Students are expected to be committed to the class as a whole, which includes attending all class rehearsals and performances. There will be performances in school, at festivals, and a curricular overnight field trip. This course occurs in a Block X on Tuesdays after school (3pm to 4:30pm) and Thursday mornings before school. (7am to 8:25am).

Chamber Choir (Grade 11-12)

This course is by audition only. The class is taught yearlong inside the regular school schedule, backed with Senior Concert Band. Grade 11s and 12s (current Grade 10s and 11s) will have priority for being a part of the group. However, Grade 10s (current Grade 9s) are welcome to audition. The chamber choir delves more deeply into the artist merits of the choral art form, exploring text music relationships as well as experiencing and performing several different genres and languages. Any student currently in the choral program can audition for a position in the choir, and auditions will take place in May/June prior to the course commencing. If you are interested in auditioning, you need to register for the course first.

Senior Jazz Band (Grade 11-12) *Block X (Outside timetable)

Prerequisites: Successful completion of the preceding Jazz Band course or director's permission. Students continue to develop skills learned in Junior Jazz. Students will continue to learn how to play in a variety of styles, including Jazz, Rock, and Latin. Method books and individual charts will be used with an emphasis on concert performances. Students will learn the basic techniques of improvisation and specific rhythms/scales related to jazz. The course will take place on Wednesday and Friday mornings before school starts (7am to 8:25am). Limited instruments are available for rental from the school (\$120 for the year).

VISUAL ARTS

Studio Art 11

Prerequisite: None- Students who haven't taken art are welcome to join the class or continue their exploration of art if they have taken art in previous grades.

This course is designed for students to explore image and art making with a variety of image creation techniques as well as exploring different tools, methods and materials. Projects will have different themes and concepts, but how it is approached will be up to the students to decide in an effort to have students respond to themes and prompts in a way which best suits their art making practices and ideas. Areas of self-exploration and expression will include drawing, painting, water colour, clay work and other materials that the students choose to work with in their project work. There will also be self-directed projects so that students can freely explore their own ideas and themes as well as utilizing materials that they feel would best suit their self-directed work.

Studio Art 12

This course is designed for students to explore image and art making with a variety of image creation techniques as well as exploring different tools, methods and materials. Projects will have different themes and concepts, but how it is approached will be up to the students to decide in an effort to have students respond to themes and prompts in a way which best suits their art making practices and ideas. Areas of self-exploration and expression will include drawing, painting, water colour, clay work and other materials that the students choose to work with in their project work. There will also be self-directed projects so that students can freely explore their own ideas and themes as well as utilizing materials that they feel would best suit their self-directed work.

Media Arts: Digital Photography 11

Have you always wanted to learn how to photograph and edit beautiful images?

Students in Media Arts/Digital Photography 11 will explore photography, graphic arts and media technology. Expect to learn: how to manually operate a professional digital DSLR camera, how to compose striking images using the elements and principles of photography, how to edit your images and create graphic art using Adobe Photoshop, and how to use a lighting studio. You will also learn how to get your artwork out to an audience through Instagram and by creating an online photography portfolio. Finally you will learn how to create thoughtful, meaningful and professional photographs and artwork by exploring emotions, social contexts and occupations of photographers.

Media Arts: Digital Photography 12

Did you love Media Arts/Digital Photography 11? Are you hoping to develop your own style as a photographer and get involved in some real photography work around the school? Then this advanced Media Arts/Digital Photography 12 course is perfect for you. It is recommended that Media Arts 11 be completed before taking Media Arts 12 Credits available for VAMT12 – 2 credits for Fine Arts and 2 credits for Applied Skills.

In this class you can expect to get in depth into the artistic and professional nature of photography. You will start to develop your own personal photography style through learning about contemporary photographers, going on field trips and photographing events. You will learn about photographic themes and come up with a series of artwork that reflects your personal, cultural and social expression. You will also learn professional strategies for working as an amateur photographer right out of secondary school.

CAREER EDUCATION

Career Life Connections (CLC) & Capstone 11/12

Career Life Connections & Capstone will enable students to develop the skills they need to become self-directed individuals who successfully set goals, make thoughtful decisions, and take responsibility for pursuing their goals throughout life. Students will explore education and careers, health, and finance. At the end of the course, students will be more aware of opportunities that are available to them. Students will also design, assemble and present the Capstone Project, which is a final showcase of your high school achievements and future plans.

Topics include:

- Career & Life planning
 - Field trip: University & college tours (UBC, SFU, KPU, BCIT, VCC)
 - Options beyond post-secondary (trades, work, travel)
 - Post-secondary prep: applications, entry essays, studying, note-taking, academic writing, stress management, time-management, etc.
 - Scholarships
 - Employment & work readiness—resumes, cover letter, interview, communication skills, digital footprint, etc.
- Personal Development
 - Finances—financial aid, tuition, moving out, budgeting, debts, taxes
 - Health & wellbeing
 - Relationships
 - Identity exploration
- Connections to Community
 - 30 hours of proven work or service in the community

Work Experience (WEX) 12A & 12B

Work experience is completed outside of school hours as an X-block. Work experience prepares students for the transition from secondary school into their chosen careers or post-secondary education. Through work experience, students have the opportunity to observe and practice generic employability skills required in the workplace, as well as technical and applied skills relating to specific occupations and industries. The 90 hours required at a job site are tailored to each individual's needs, interests, and schedule. To take part, students must have completed a careers unit in Career Life Explorations (CLE) 10 and be in grade 10, 11 or 12. Students completing 90 hours of work experience will receive 4 credits for WEX 12A. Those who complete an additional 90 hours can gain a further 4 credits for WEX 12B. Various assignments and evaluations before, during and after this program are required to receive credit.

ITA Youth Work in Trades

Students who are currently working in a trade or would like to work in a trade can earn credit, both toward secondary school graduation and provincially recognized industry training certification. The program allows students to register as apprentices/ trainees and start acquiring hours towards a trades certification. Students must be registered in the program and complete 480 hours of on-the-job training while in high school. Students will receive 4 credits for every 120 hours worked for a maximum of 16 credits. If they stay in the trade for 6 months after graduation or have completed 900 hours, they will have the opportunity to receive a \$1000 award. Students must be at least 15 years of age and be in Grade 10, 11, or 12. To access this program go to the Career Centre right away!

LEARNING COMMONS

Library Science 11/12

Recommendation: Permission from Instructor, applications are available in the Learning Commons. Are you interested in information and technology? In this course you will learn how to run and maintain the library. You will:

- Study library management, organization, and service
- Develop customer service and public speaking skills while working with our Learning Commons patrons
- Promote the library by designing activities, contests, and bulletin boards
- Learn to use blogs, apps, and a variety of web 2.0 tools to present information
- Select materials for the Learning Commons with our Teacher-Librarian, and learn how to critically evaluate and select books and resources
- Explore careers and/ or visit a library to learn about the role of the library in the community

If you like books and technology, and would like the experience of working in a library, then this is the course for you. You will have the opportunity to work on projects based on your interests and talents, but the ability to work independently on projects is required. No previous library experience is necessary.

LEADERSHIP/PEER TUTORING

BA Peer Counselling & Mediation 11

Prerequisite: (Applications available from Counselling Department) In Peer Counselling and Mediation 11, the goal is to provide skills in communication and mediation (conflict resolution), enabling peer counsellors to provide support for their peers at Johnston Heights Secondary. Peer counsellors will also be involved in leadership roles and activities as they organize projects to address issues that concern youth (ie: bullying, racism, social media, healthy relationships, etc). The course is designed to provide students with the basic skills necessary to establish and maintain successful helping relationships with peers. Students will develop skills in the areas of interpersonal communication, empathic listening, questioning techniques, ethics, decision-making and problem solving, peer mediation, and mentoring.

COURSE OBJECTIVES:

- To demonstrate respect, empathy and genuineness while working with others.
- To demonstrate good listening skills during counselling/mediation sessions.
- To remain neutral and temporarily suspend personal value, beliefs, judgments, emotions and premature advice when in a counselling/mediation session.
- To mediate conflicts between two or more parties by employing communication and mediation skills.
- To choose an issue of concern and implement a school wide project aimed at increasing awareness and promoting a healthy environment at Johnston Heights Secondary.

BA Peer Tutoring 10, 11 & 12

Prerequisite: (Applications available from Counselling Department) This course is designed to provide senior students, grade 10-12, with the opportunity to enhance their interpersonal communication and leadership skills while assisting younger students in the classroom. Peer tutors are students with:

- Excellent attendance and behaviour,
- Average to above average grades
- A positive attitude towards learning

Peer tutors are students who show initiative, independence, respect for others and for learning, and have a strong desire to work closely with teachers and students. The intent of this course is to provide tutors with training and experience to enhance communication, leadership, and study skills. Students will study a variety of challenges that can interfere with learning: English language learners (ELL), Learning Disabilities, ADD/ADHD, Autism, and other concerns that decrease a students' ability to learn. The final grade for a peer tutor is based on interaction and support of tutees, daily journals, assignments and regular evaluations by sponsor teacher and peer tutor teacher.

BA Student Leadership 11 & 12

Components:

1. Managerial, event coordination, self-confidence, and presentation skills development
2. Service and support to peers, school, community
3. Active members of other programs & initiatives (eg. social justice, international relations)
4. Promotion of school spirit
5. Student Voice via participation & presentations at local, community, and district levels
6. Project Management via planning and production of various sized activities, projects and events.
7. Involvement with causes, events, programs that will impact on the students' world of tomorrow

Structure:

1. Formal tutorials - leadership styles, characteristics, personal development, presentation skills
2. Skill training & development via mentorships, speakers, workshops, seminars
3. Participation, networking, sharing, peer to peer learning at local, district, lower mainland, and provincial level training sessions, think tanks, conventions, and conferences
4. Projects and major events – organizational skills honed via planning, coordinating, promoting & producing various-sized projects and events
5. Involvement in school-based, community, district, and lower mainland initiatives

Methods:

- | | | |
|-------------------------|----------------------------------|------------------------------------|
| • Direct instruction | • Peer to peer teaching/learning | • Written and oral reports |
| • Experiential learning | • Mentorships & Research | • Individual, Team, and Group work |

BA Recreational Leadership 11 & 12 (PERLS) X-Block Outside timetable

Purpose: to facilitate school culture via the creation of an environment and activities aimed at student engagement inclusion, creativity, activity, and service.

Structure: Weekly meetings and most of the service happening outside of school hours. Physical Education and Recreational Leadership will be a combination of in class learning, planning, and implementing of school, athletics, and physical education initiatives. Interview process to determine class entry.

Learning Opportunities

Athletics:

- Officiating (Volleyball, Basketball (Elementary), Soccer (Elementary))
- Basketball Game Management
- Event organization (Cross-country and Track Meets, Elementary school Play-days)
- Coaching (Elementary Teams)

Physical Education

- Mentorship in class
- Event Organization (JH Pentathlon, JH Strong Person)
- Organization of Gym spaces and equipment

School Community

- Event Organization (Pep Rallies, Staff vs Students)
- Intramural Sport Organization
- School Initiatives (JH Radio, Service Initiatives)

Selection Interview required. Linear course.

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|--|-----------------------------|
| • Event and activity planning and implementation | • Team building |
| • Promotion and reporting of events | • School/community projects |
| • Minor officiating and scorekeeping | |

District-Wide Career Education Programs:

Website: surreyschools.ca/departments/CAED

Program	Trade / Certification	Location	Credits	Program length	Minimum Requirements
Automotive Collision	Motor Vehicle Body Repairer (Metal & Paint) - Automotive Collision Repair Technician	VCC Automotive Collision Department (Broadway Campus)	<ul style="list-style-type: none"> • 6 TRNZ 12 dual credits • WEX • Level 1 Foundation Technical Training • VCC Certificate of Completion 	<ul style="list-style-type: none"> • 32 Weeks • January start date • 4 days a week 	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 11 • Mechanical aptitude • 1 week trial experience at VCC
Automotive Refinishing Prep Technician	Automotive Refinishing Prep Technician	VCC Automotive Collision Department (Broadway Campus)	<ul style="list-style-type: none"> • 4 TRNZ 12 dual credits • WEX • Level 1 Foundation Technical Training • VCC Certificate of Completion 	<ul style="list-style-type: none"> • 20 Weeks • February start date • 4 days a week 	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 11 • 1 week trial experience at VCC
Automotive Service Technician	Automotive Service Technician	Lord Tweedsmuir Secondary * 4 weeks at KPU (Cloverdale Campus)	<ul style="list-style-type: none"> • 3 AST 12 & 1 TRNJ 12 dual credits • WEX • Progressive Trades Level 1 Apprenticeship Training • ITA Certificate of Qualification (TBD) • Kwantlen Certificate of Completion 	<ul style="list-style-type: none"> • 21 Weeks • February start date • Program may extend into July 	<ul style="list-style-type: none"> • C or better in a math 11 • Physics 11 or related science 11 • An English Language Arts 11 • AST 11
Aviation Ground School	Private Pilot Coursework	Canadian Flight Centre	<ul style="list-style-type: none"> • IDS – WEX 12 (4 credits) • 40 hours of ground school instruction leads towards a private pilot license 	<ul style="list-style-type: none"> • 13 weeks • Spring intake • Wednesday Evenings 	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 10 • 16 years of age
Baking & Pastry Arts	Baker	VCC - Vancouver Community College (Pender Campus)	<ul style="list-style-type: none"> • 6 TRNZ 12 dual credits • WEX • Level 1 Foundation Technical Training 	<ul style="list-style-type: none"> • 24 Weeks • July start date 	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 10 • Food Safe Certificate • Complete one week WEX @ VCC Baking
Carpentry	Carpenter	Guildford Park <i>or</i> Frank Hurt Secondary * 4 weeks at KPU (Cloverdale Campus)	<ul style="list-style-type: none"> • 3 CARP 12 & 1 TRNJ 12 dual credits • AWM 11 (Guildford Park only) • Level 1 Foundation Technical Training • Kwantlen Certificate of Completion 	<ul style="list-style-type: none"> • 21 Weeks • February start date 	<ul style="list-style-type: none"> • C or better in a math 10 • C or better in an English Language Arts 10
Culinary Arts	Professional Cook 1	Tamanawis Secondary * 5 weeks at VCC (Pender Campus)	<ul style="list-style-type: none"> • 3 CKT 12 & 1 TRNZ 12 dual credits • WEX • Progressive Trades Level 1 Technical Training • VCC Certificate of Completion 	<ul style="list-style-type: none"> • 21 Weeks • February start date 	<ul style="list-style-type: none"> • Grade 10 completion • Food Safe Certificate
Drafting/ CADD	Computer Aided Design and Drafting	KPU (Cloverdale Campus)	<ul style="list-style-type: none"> • 4 PSIJ 12 dual credits • Kwantlen Polytechnic University Citation in CADD Technologies 	<ul style="list-style-type: none"> • September to August • September – May: 2 nights a week/ 3 hours per night • May-August: 1 night a week plus online component 	<ul style="list-style-type: none"> • Grade 10 completion • A math 10 with C+ or higher • Has taken or enrolled in CADD/Drafting 11 and/or 12 • Strongly recommend completion of Grade 11
Education Assistant Diploma	Education Assistant	Surrey Community College	<ul style="list-style-type: none"> • MFM 11 and/or MFM 12 • WEX 12A • WEX 12B 	<ul style="list-style-type: none"> • 42 Weeks • January to November (includes weeks for shortened spring break and summer break) 	<ul style="list-style-type: none"> • Grade 12 English • All grade 10 and 11 graduation requirements
Electrical	Construction Electrician	Princess Margaret Secondary	<ul style="list-style-type: none"> • 8 TRNA 12 dual credits • WEX or WRK • Level 1 Foundation Technical Training • BCIT certificate 	<ul style="list-style-type: none"> • 2 semesters 	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 10 • Physics 11 or Chemistry 11

Hairstylist	Hairstylist	School District #36 Hairdressing School (North Surrey Learning Centre)	<ul style="list-style-type: none"> • 6 TRITA 12 courses • 2 WEX • YPA 12B • Beauty Council Certificate of Completion (TBD) • Industry Training Authority Certificate of Qualifications 	• 2 semesters	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 10
Headstart in Art	Foundation level Art course	Guildford Park Secondary (Art Room)	<ul style="list-style-type: none"> • Emily Carr credit for FNDT 106 Drawing & 2D Language (recognized at most other post-secondary institutions) 	<ul style="list-style-type: none"> • September to December • Wednesdays 4:30PM to 7:30PM 	<ul style="list-style-type: none"> • C or better in an English Language Arts 11 or 12 • 2 other Grade 11 or 12 academic courses • 2 other Grade 11 or 12 elective courses • Art teacher recommendation
Heavy Mechanical Trades Foundation	Heavy Mechanical	VCC (Annacis Island)	<ul style="list-style-type: none"> • 7 TRNZ 12 dual credits 	<ul style="list-style-type: none"> • 36 weeks • February start date 	<ul style="list-style-type: none"> • A grade 11 math • An English Language Arts 11 • Fluent in English • Must be in grade 11 to apply • Automotive Service Tech 11 & 12 recommended
Horticulture	Landscape Horticulturist	KPU (Langley Campus)	<ul style="list-style-type: none"> • 2 TRNJ 12 dual credits • 2 WEX • Level 1 Apprenticeship Technical Training • Kwantlen Certificate of Completion 	<ul style="list-style-type: none"> • 6 weeks plus work experience to follow the classroom study • Late February start date 	<ul style="list-style-type: none"> • Grade 10 completion • C or better in a math 10 and an English Language Arts 10
Law Enforcement Preparatory Program	Canadian Criminal Justice System Course	Kwantlen Park Secondary	<ul style="list-style-type: none"> • 1 PSIM 12 dual credit • Transferrable credit to JIBC 	<ul style="list-style-type: none"> • September to December • Tuesdays from 5-8pm 	<ul style="list-style-type: none"> • Grade 12 student • C+ or better in a math 10 and an English Language Arts 10
Masonry	Bricklayer - Mason	KPU (Cloverdale Campus)	<ul style="list-style-type: none"> • 4 TRNJ 12 dual credits • Level 1 Apprenticeship Technical Training • Kwantlen Certificate of Completion 	<ul style="list-style-type: none"> • 21 Weeks • February start date 	<ul style="list-style-type: none"> • Grade 10 completion • C or better in a math 10 and an English Language Arts 10 • Physical ability to do heavy lifting
Metal Fabrication	Metal Fabricator (Fitter)	BCIT (Burnaby Campus)	<ul style="list-style-type: none"> • 5 TRNA 12 dual credits • Level 1 foundation Technical Training • BCIT Certificate 	<ul style="list-style-type: none"> • 23 Weeks • February start date 	<ul style="list-style-type: none"> • Grade 10 completion • C or better in a math 10 and an English Language Arts 10
Millwright	Industrial Mechanic - Millwright	KPU (Cloverdale Campus)	<ul style="list-style-type: none"> • 5 TRNJ 12 dual credits • Level 1 Foundation Technical Training • Kwantlen Certificate of Completion 	<ul style="list-style-type: none"> • 24 Weeks • February start date 	<ul style="list-style-type: none"> • Grade 11 completion • C or better in a math 11 and an English Language Arts 11 • Physics 11 recommended
Painter	Painter and Decorator	The Finishing Trades Institute of BC Training School	<ul style="list-style-type: none"> • 1 TRITA 12 dual credit • Level 1 Apprenticeship Technical Training 	<ul style="list-style-type: none"> • 6 Weeks • June start date 	<ul style="list-style-type: none"> • A math 10 • An English Language Arts 10
Plumbing	Plumber	École Panorama Ridge Secondary	<ul style="list-style-type: none"> • 4 TRNJ 12 dual credits • Level 1 Foundation Technical Training • Kwantlen Certificate of Completion 	<ul style="list-style-type: none"> • 24 Weeks • 2 intakes • August & February start dates 	<ul style="list-style-type: none"> • C or better in a math 10 and an English Language Arts 10 • Physics 11 recommended
Roofing	Rofer	Roofing Contractors Association of British Columbia	<ul style="list-style-type: none"> • 1 TRITA 12 dual credit • WRK 11A, 11B, 12A, 12B credits 	• 5 weeks February 2018	<ul style="list-style-type: none"> • Grade 10 completion • C or better in a math 10 and an English Language Arts 10
Trades Sampler	Multiple Trades & Technologies	BCIT (All Campuses)	<ul style="list-style-type: none"> • 3 TSTA 12 dual credits • WEX 12 	<ul style="list-style-type: none"> • 12 Weeks + WEX • February start date 	<ul style="list-style-type: none"> • Grade 12 English • All Grade 10 and 11 graduation requirements
Welding	Welder	KPU (Cloverdale Campus)	<ul style="list-style-type: none"> • 6 TRNJ 12 dual credits • Level 1 & 2 Foundation • Kwantlen credential 	<ul style="list-style-type: none"> • 28 Weeks • February start date 	<ul style="list-style-type: none"> • Grade 10 completion • C or better in a math 10 and an English Language Arts 10
Youth Work In Trades (formerly SSA)	Work hours in a trade	Various Employer Sites	<ul style="list-style-type: none"> 2 WRK 11 courses 2 WRK 12 courses 	Continuous entry	<ul style="list-style-type: none"> • Minimum 15 years of age • Under 19 years of age Registered as an apprentice with a ticketed trades person