

# HJ Cambie Secondary

## Program Planning Guide

**RAISING THE BAR**



**2020-21**

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## Introduction to Program Planning

This program planner is intended to support students and their parents/guardians in choosing courses for the 2020-2021 school year. Certain courses must be taken to meet the graduation requirements prescribed by the Ministry of Education, while others courses can be chosen to meet individual interests and goals. This planner describes the requirements of each grade, the content of individual courses, and the various programs and services at H.J. Cambie Secondary.

The school's timetable is determined by the students' course requests in February. It is important that students select courses carefully at this time, as course changes may not be possible in September. While each student will have an individualized timetable, these timetables can be impacted by the facilities and staffing of Cambie School, provincially-determined graduation requirements, and the number of course requests. Students should anticipate some course scheduling conflicts and be prepared to select alternative courses.

Elective courses are offered if there is sufficient enrollment to warrant a class. Consequently, it is possible that not all of the courses described in this booklet may be offered each year. The possibility also arises that a student may select a course that cannot be scheduled. In this case, the student will be given an alternate elective, suitable for his/her timetable. **We ask that students provide thoughtful, alternate selections when they are course planning.**

We encourage students to explore a wide range of courses during their time in high school. If students have already formulated plans for their post-secondary education or careers, they should ensure that all required prerequisite courses have been completed. This information can be found on the websites of all post-secondary institutions and programs, or through the assistance of our career advisor or our counsellors. Please feel free to contact the administration, school counsellors, or the career advisor for any program planning questions.

**<http://hjcambie.sd38.bc.ca/>**

Cambie's school website is designed to provide the school community with easier access to events happening at our school. Students will be able to view course descriptions for next year and important information relating to school life and course selection.

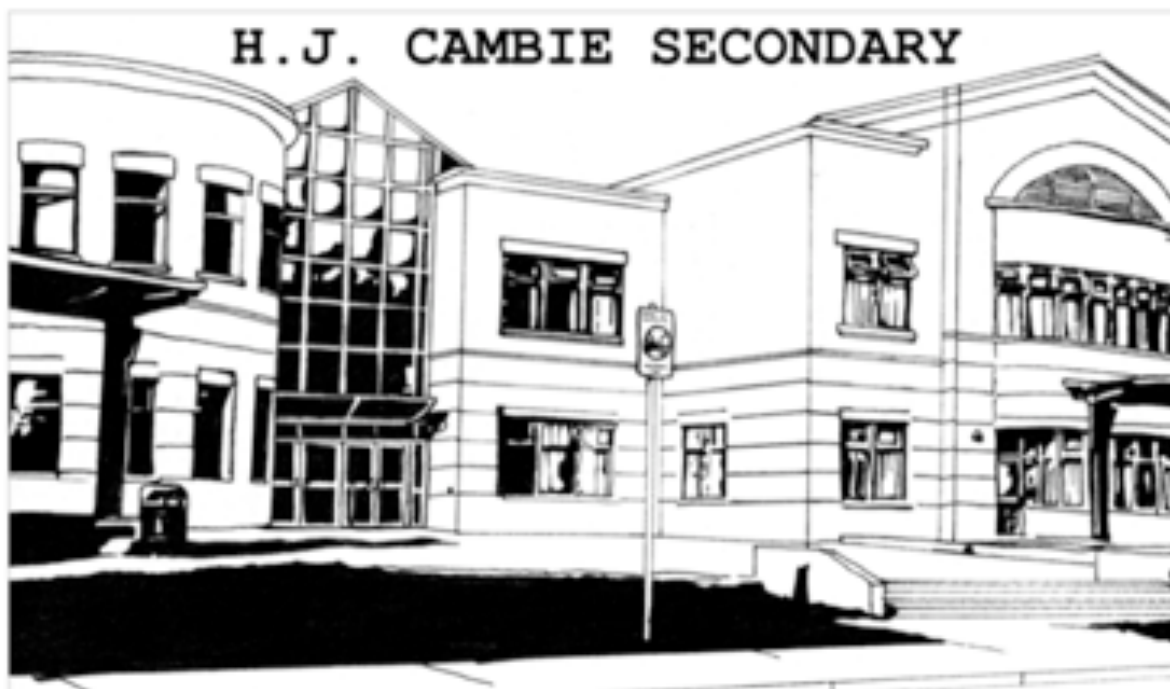
## Important Dates for Program Planning

January 28	Grade Assemblies (8-11) for Program Planning
January 29-30	Grade 8 to 11 Program Planning follow-up visits
Jan. 28 – Feb. 6	Online MyEdBC Course Selections completed by students at home
February 5	Counsellors offer optional lunch time MyEdBC Course Selection entry session in computer lab A110
February 7	Course Selection Forms Due into the Office (with alternate selections and signed by parents)
April 1	Course Selection Confirmation shared published with Report Cards
April 8	Online course request corrections/changes due using webform submissions



## Table of Contents

Introduction to Program Planning	1	Graduation Assessments	9
Important Dates	1	Scholarship Information	10
Registration/School Information	3	Pathways Program	11
Attendance	3	Work Experience Programs	13
Costs Associated with Courses	3	District Career Education Programs	16
Course Load	3	Online Programs	17
Fees	3	Cambie Course Catalogue	19
Provision of Musical Instruments	3	Art	21
Textbooks	3	Business Education	27
Student Services	4	English	29
Career Resource Centre	4	English Language Learners (ELL)	32
Library Learning Commons	4	Home Economics	34
English Language Learners	5	Mathematics	36
Advanced Placement Program	5	Modern Languages	39
Challenging Course	5	Music	42
Course Equivalency	6	Physical & Health Education	44
External Credits	6	Resource	47
Core Competencies	6	Science	48
Evaluation	6	Social Studies	51
Proficiency Scales & SRPP	6	Specialty Courses	53
English Language Learners Program	7	Technology Education	56
Program/Graduation Requirements	8	Theatre	65
Student Timetable	9	Appendix: Career Education Programs	





## **Registration**

Registration at Cambie consists of enrollment in the school, selection of courses, and timetabling of classes. The procedure outlined below is for students with parents/legal guardians who are permanent residents of Richmond. Students who do not live with their parents/legal guardians should contact the school office to clarify registration procedures.

### **Students entering Grade 8**

Cambie counsellors conduct most of the registration procedures through program planning at feeder schools in January. A student is considered registered once all forms have been completed and returned. Students registered through this process will receive a letter in August explaining back-to-school procedures and dates.

### **Transfer Applications**

Students whose residence is not in the Cambie catchment area must apply to attend Cambie. The school transfer form is due no later than 3 p.m. on Friday, February 28, 2020. Acceptance is based on the space availability and the regulations published by the Richmond School Board.

### **Other Students**

Students who apply to register at times other than during the program planning sessions need to contact the school for an appointment, bring a copy of their permanent record card or most recent report card and, where necessary, a school transfer form and proof of residence.

## **School Information**

### **Attendance**

There is a school expectation that students attend all classes in which they are registered and attend them on time. Poor or inconsistent attendance has a direct impact on course standing, and will be dealt with in a manner that supports student learning.

### **Costs Associated with Courses**

Basic supplies required to fulfill learning outcomes in all courses will be provided to students free of charge. Should a student wish to use other or additional supplies, these may be purchased independently or through the school at cost. Students wishing to take home or to consume completed project work may also do so on a cost-recovery basis. Students may be asked to pay for optional field trips. Some courses also offer optional course workbooks for purchase.

### **Course Load**

All students in grades 8-11 must carry a full schedule of classes - 8 classes per year. Any exceptions to the full load requirement must be approved by the administration. Grade 12 students may request a study block. Senior students with less than a full-load will reduce their odds of receiving a school-based scholarship.

### **Fees**

An annual student fee has been set by the school district and each student is required to pay this fee. It covers the cost of student agendas, communication, and student council/activity fees. There may also be charges for students who are part of teams and clubs.

### **Textbooks**

Subject teachers issue textbooks to students. There is no charge for school texts but if they are not returned or are returned with more than normal wear, students will be billed for their replacement.







## Student Services

### **Counsellors**

Counselling services are available to all students at Cambie, and all students are welcome in the counseling centre. The goal of the counselling centre is to assist students in a variety of ways:

- to ensure their well being
- to explore and develop educational programs and plans
- to provide counselling involving home or school challenges
- provide referrals to appropriate agencies
- to gain information about educational and community resources

Counsellors consult with teachers, administrators, parents, and other support staff regarding the educational, personal, and social development of students. Students are encouraged to make their own appointments with their assigned counsellor. As well, the counsellors welcome parent inquiries. If parents wish to speak with a counsellor, appointments can be scheduled by contacting the main office at 604-668-6430.

### **Career Centre**

The District Career Centre at Cambie provides a wide range of career information materials in the following areas: individual occupations; college, university, technical, and vocational programs; trade and apprenticeship training programs; job-hunting skills; resume preparation; scholarship and financial aid; and application to colleges and universities

### **Career Centre Website:**

<https://portal.sd38.bc.ca/group/2jdxzsf/Pages/default.aspx#/=>

The website provides students with information on career and post secondary options such as career fairs, program information sessions, entrance tests, campus tours, scholarships, and exchange programs. The website also provides general information about post-secondary educational options, as well as employment and volunteering opportunities.

**Please note:** Post-secondary and scholarship information is constantly changing. Although we do our best to provide students with the latest information, we may not always be able to do so. It is, therefore, the students' responsibility to contact relevant sources for more up-to-date and accurate information.

### **Learning Resource Services**

The goal of the Learning Resource team is to ensure that all students have an equal opportunity to be successful in school. Students qualifying for support will receive help with their academic courses while they learn to use a variety of learning strategies. Additionally, teachers will help students with homework completion and skills development, and the Resource Team will closely monitor student work habits. Students who receive Resource support are identified through consultation with the student, student's parents, counsellor, the school-based team, and the Resource Department.

### **Cambie Commons**

Cambie Commons provides drop in academic support to all Cambie students throughout the school day. Students may access the Commons during all of their classes with teacher permission. While in Cambie Commons, students work with teachers individually or in small groups to:

- get extra help with challenging assignments
- review or catch up on class material
- develop reading, writing, math, study, or organizational strategies
- work in a quiet, focused environment
- ....and much more!

### **Library Learning Commons**

The Cambie library is a vibrant, flexible learning space that offers curriculum-oriented non-fiction materials, reference books, and encyclopedias, as well as a wide array of fiction titles and magazines (and a relaxation center). Students have access to a printer and photocopier, and DVDs are available for classroom use. The collection, with its range of reading levels, is designed to meet the needs of students and staff doing research projects, independent study, and recreational reading. Computers with internet access are provided for students doing school-related research, and students are encouraged to make use of our green screen, white boards, and 3-D printer. Our catalogue is online and can be accessed at home. Assistance is always available to students who need help locating resources that will meet their individual needs. The library is open everyday from 8:00 a.m. to 3:30 p.m.





## English Language Learners

At Cambie, the English Language Learner program is offered to help students develop fluency and literacy in English, so that they will be able to be successful in the academic and social environment of regular classes. The goals of the ELL program are as follows:

- To assist students with attaining competency in listening, speaking, reading, and writing in English.
- To assist students with their integration into the regular curriculum.
- To assist students in developing an appreciation for the multicultural nature of Canadian society.
- To prepare students to contribute positively to Canadian society.

A student is programmed according to his or her English language skills and receives language support according to his or her ELL level.

## ELL Program Organization

ELL programming for students will depend on their ELL levels and grades:

	Required	Permitted
Level 1	3 blocks of ELL	<b>Math, PHE,</b> and electives
Level 2	3 blocks of ELL	<b>Science,</b> Math, PHE, and electives
Level 3	2 blocks of ELL	<b>Social Studies,</b> Math, Science, PHE, and electives
Level 4	1 block of ELL	<b>English,</b> Social Studies, Math, Science, PHE, and electives
Level 5	ELL Support	Regular Program

## Course Information

For a list of all our courses, see the course catalogue at the end of this booklet or visit our website at <http://hjcambie.sd38.bc.ca>.

### Advanced Placement Program

The Advanced Placement Program (AP) is a program of acceleration and enrichment that allows gifted or motivated students to begin their college or university studies while still in secondary school. The successful completion of an AP course, with an appropriate level of proficiency on a standardized AP exam, will allow students to apply to colleges and universities for advanced standing, course credit, or both. The AP program helps students pursue challenging academic activities and to develop higher-level thinking skills.

Cambie offers AP courses in:

- Art & Design 12
- English Literature & Composition 12
- Calculus 12

Students taking these courses write Advanced Placement examinations in May of each year. As is the case for all courses

offered at Cambie, sufficient enrollment is required for courses to run.

In Canada, AP courses are rapidly growing in popularity. UBC, SFU, and UVIC recognize the AP program. Students admitted to these institutions who have completed AP subjects with high academic achievement may receive advanced placement credit. AP is recognized in most Eastern Canadian universities as well as all American colleges and universities.

### Challenging Courses

Challenge is *undocumented prior learning*. Students are entitled to use Challenge to receive credit for Ministry-Developed or Board/Authority Authorized Grade 10, 11, or 12 courses. For more information about challenge procedures, please talk to your school counsellor.

#### Language Course Challenge

Students interested in challenging a language course must sign up in October in order to write the exam in January. Please see your school counsellor for further information.





## Course Equivalency

Course equivalency is receiving credit for a Grade 10, 11, or Grade 12 course when documentation shows that the student has achieved the learning outcomes of a course offered within the regular British Columbia school system at an outside institution. Equivalency credits are only granted for courses that meet all of the following requirements:

- The student is able to provide documentation that the course has been successfully completed.
- The course(s) matches 80% of the prescribed learning outcomes of a Ministry-Authorized or Board-Authority Authorized course taught within the district.
- The course has been taken at another institution or educational jurisdiction outside the regular British Columbia system.

## Core Competencies

The Core Competencies overarch all aspects of the renewed curriculum: The Big Ideas, Curricular Competencies, and Content. We are working hard to ensure students are mindful of their growth in relation to the Core Competencies (Communication, Thinking, and Self Awareness & Social Responsibility) through self-reflection activities.

## External Credits

An external course is an organized set of learning activities that is developed or offered outside the regular school system. Students may earn graduation credit for successfully completing an external course approved by the Ministry of Education. The Ministry has reviewed and declared as creditable certain credentials from institutions that include, but are not limited to:

- Royal, B.C., and Victoria Conservatory of Music
- Driver's Training Education Programs sponsored by ICBC
- Dance & Drama programs
- Drama courses

- Language Certificates
- Sport Categories (athlete, coach, official)

## Evaluation

Teachers use a variety of evaluation procedures related to the nature and content of each course. Report cards are issued at the end of each term. Interim reports are issued by the teacher at the mid-point of 1st and 2nd term and at other times during the school year if needed. Student grades are reported as letter grades for Grades 8 and 9, and as both percentage and letter grades for students in Grades 10 to 12. The breakdown of letter grades used is listed below:

A	86% - 100%	B	73% - 85%
C+	67% - 72%	C	60% - 66%
C-	50% - 59%	I	Incomplete

Students receiving less than 40% as a final grade are not eligible for Remedial Summer School.

An "I" (40%-49%) on the final report card will qualify students to attend remedial summer school. A failure at summer school, or not attending summer school, will result in the "I" mark being replaced by an "F" (Fail). If you have concerns, please consult with your counsellor. It is the student's responsibility to ensure that he/she is enrolled in the appropriate courses.

## Proficiency Scales & SRPP

Many of our teachers are doing innovative assessment practices which include being a part of the Student Reporting Policy Project (SRPP). This practice will hopefully increase the communication of student learning, as well as provide more rich feedback for students, using core competency language, digital portfolios, learning conferences, and proficiency scale language.

- Emerging: initial understanding
- Developing: partial understanding
- Proficient: complete understanding
- Extending: sophisticated understanding



## English Language Learners Program

Intermediate Program (grades 8 and 9)	Graduation Program (grades 10, 11 and 12)
<b>Level 1</b> ELL 1 Social Studies Junior ELL 1 Literature Junior ELL 1 Science Junior Math Physical & Health Education 3 Electives	<b>Level 1</b> ELL 1 Social Studies Senior ELL 1 Literature Senior ELL 1 Science Senior Math Physical & Health Education (10s) 3 Electives
<b>Level 2</b> ELL 2 Social Studies Junior ELL 2 Literature Junior ELL 2 Science Junior Math Science Physical & Health Education 2 Electives	<b>Level 2</b> ELL 2 Social Studies Senior ELL 2 Literature Senior ELL 2 Science Senior Math Science Physical & Health Education (10s) 2 Electives
<b>Level 3</b> ELL 3 Literature Junior ELL 3 Composition Junior Math Science Social Studies Physical & Health Education 2 Electives	<b>Level 3</b> ELL 3 Literature Senior ELL 3 Composition Senior Math Science Social Studies Physical & Health Ed. (10s), Career Life Education (11s,12s) 2 Electives

*\*All level 5 students are in mainstream courses and additional ELL support is available*

*\*\*Students must complete all core courses in grades 10, 11, and 12, as they are required for graduation.*

*\*\*\* ELL Students do not receive letter grades or percentages on report cards; instead, they receive Progress Reports that inform the students and parents of the students' current listening/speaking, reading and writing levels.*



## Requirements and Course Selection

### Intermediate Program

#### Grade 8

- English Language Arts 8
- Social Studies 8
- Math 8
- Science 8
- Physical and Health Education 8
- Applied Design, Skills & Technology 8
- French 8
- One elective from:
  - Art Studio 8
  - Band 8
  - Guitar 8
  - Choir 8
  - Drama 8

#### Grade 9

- English Language Arts 9
- Social Studies 9
- Math 9 or Workplace Math 9
- Science 9
- Physical and Health Education 9
- 1 Fine Arts Elective
- 1 Applied Design, Skills & Technology
- 1 additional Elective

Students in Grade 9 must select at least one elective in the fine arts stream and one elective in the applied design, skills & technology stream, based upon interest and past achievement.

### Graduation Program

- English 10 (Composition 10 & Focused Literary Studies)
- Social Studies 10
- A Math 10 (Workplace Math 10, Foundations of Math and Pre-Calculus 10)
- Science 10
- Physical & Health Educ. 10
- 3 Electives

- Literary Studies 11
- A Social Studies 11 or Social Studies 12
- A Math 11 (Workplace Math 11, Foundations of Math 11, Pre-Calculus 11)
- Science 11 (Life Science 11, Chemistry 11, Physics 11, Science for Citizens 11)
- Career Life Education 10
- 3 Electives

- Literary Studies 12
- 7 Elective Courses:
  - Any Grade 12 Course
  - Any Grade 12 Course
  - Any Grade 12 Course
  - Any Gr. 10,11,or 12 Course
  - Any Gr. 10,11,or 12 Course
  - Any Gr. 10,11,or 12 Course
  - Any Gr. 10,11,or 12 Course
- Career Life Connections + Capstone

\*A Fine Arts and/or Applied Skills 10, 11, or 12 (4 credits)

Some post-secondary programs require successful completion of a Modern Language to the grade 11 level.







## Personal Student Planning Guide

Grade 8	Grade 9 Program	Grade 10 Program	Grade 11 Program	Grade 12 Program
English 8	English 9	Composition & Literary Studies 10	Literary Studies 11	Literary Studies 12
Social Studies 8	Social Studies 9	Social Studies 10	Explorations in Social Studies 11 or a Socials Studies 12	Elective 12
Math 8	Math 9	A Math 10	A Math 11	Elective 12
Science 8	Science 9	Science 10	A Science 11 or a Science 12	Elective 12
P.H.E. 8	P.H.E. 9	P.H.E. 10	Career Life Education 11	Elective
Applied Design, Skills and Technology 8	Elective (Fine Arts)	Elective (Fine Arts or Applied Design, Skills and Technology)	Elective	Elective
French 8	Elective (Applied Design, Skills and Technology)	Elective	Elective	Elective
Elective (Fine Arts)	Elective	Elective	Elective	Elective

\* plus Career Life Connections + Capstone

**Numeracy Assessment and Literacy Assessment English:** To align with BC's New Curriculum, graduation assessments are changing. They focus on the demonstration of numeracy and literacy.

### Selecting Courses

When selecting courses during program planning it is important that all students:

1. Read the appropriate course descriptions to make sure that all requirements are met.
3. Participate in program planning evenings.
4. Discuss choice of courses with parents, teachers and counsellor.
5. Check post-secondary program requirements.
6. Submit forms on time.

### \*\* PLEASE NOTE WHEN SELECTING COURSES:

It is **very important that students select alternative courses** at this time. Some courses may be unavailable due to low enrolment or to a timetabling conflict with another course selected. In this case, students will be automatically assigned to their "alternate selection". It is very important that students select courses carefully. A change of course during the school year may be detrimental to the student's program, and is often impossible to accommodate.







## Scholarships

Students should be aware of the following scholarships: Provincial Scholarships, Richmond District Scholarships, Cambie School Valedictory Scholarships, Community-Based Scholarships and Post-Secondary Scholarships. See our Career Information Advisor or look on the district website:  
<http://public.sd38.bc.ca:8004/~ccnews>.

The following is a brief outline of scholarships that are available to secondary graduates. Detailed information can be obtained at the Career Centre.

### **1) Provincial Scholarship Program (<http://www2.gov.bc.ca/gov/content/education-training/k-12/support/provincial-scholarships>)**

**BC Excellence Scholarship** The new BC Excellence Scholarship recognizes well-rounded BC graduates who have demonstrated community service, both inside and outside of their schools, and shown aptitude and commitment to their chosen career paths. Each eligible secondary school in BC may nominate one student to apply for the scholarship. A selection committee comprised of BC teachers will adjudicate the applications and select 55 winners who will each receive a \$5000 scholarship voucher.

**BC Achievement Scholarships** 3000 top B.C. graduates with the highest cumulative average based on courses required for graduation (both required and elective) are eligible to receive a \$1250 scholarship voucher to use towards their post-secondary tuition. The Ministry will determine recipients based on students' achievement in Grades 10, 11, and 12 courses that satisfy 2004 Graduation Program requirements (including elective courses).

**Pathway to Teacher Education Scholarship** The Pathway to Teacher Education Scholarship (PTES) is awarded to 20 outstanding high school graduates who have demonstrated a commitment and aptitude for a career path in K-12 teaching. Each recipient will receive a \$5000 scholarship voucher to use towards tuition in their teaching program at a designated BC post-secondary institution.

**2) District/Authority Scholarships** A number of \$1,250 scholarships will be awarded to Cambie students who show outstanding achievement in Applied Skill, Visual and Performing Art, Home Economics, Hospitality/Foods (Cafeteria), Technology Education, Business Education, Physical Activity or Second Language. Each qualifying candidate will receive a \$1250 voucher towards post-secondary education.

### **3) Valedictory Scholarships and Bursaries**

These are scholarships and bursaries donated by the school, former graduates, the Cambie Alumni Association, businesses, organizations, and individuals in the community. Recipients are chosen on the basis of percentage averages and other criteria required by the donor group by a school-based scholarship committee. All scholarships are presented at the Valedictory ceremony in June.

Note: Students must successfully complete six (6) courses in grade 12 to be eligible to apply for a Valedictory Scholarship. In exceptional circumstances, the Valedictory committee will meet to consider an individual case.

### **4) Community-Based Scholarships**

The Career Centre receives regular scholarship information from businesses, industries, unions, and individuals. These scholarships have unique and specific criteria and are regularly posted in the Career Centre. Visit <http://public.sd38.bc.ca/~ccnews> and click on scholarships for further information.

### **5) Post-Secondary Scholarships**

Many universities and colleges offer scholarships to students as an incentive for attending their post-secondary institution. As these become known they will also be posted in the Career Centre.

### **6) McEwen Family Awards & Scholarships**

The McEwen Family Awards and Scholarships include 11 awards totaling \$28,000.00 that are presented to deserving graduates each year. These scholarships encourage students to be critical, creative, and compassionate thinkers, and provide financial support for the first step in a lifetime of learning.





## Pathways Enrichment Program

### Overview

The Pathways Program is designed for grade 8-10 students looking for Leadership Development, Social Responsibility, and Academic Excellence. This exciting program offers an integrated unit of study that combines theme-based, enriched academic courses in English, Social Studies, Science, and PHE.

Aside from these enriched courses, the Pathways Program offers day and overnight fieldtrips, leadership in the community, and outdoor education. This integrated program is focused on creating a challenging and enriched learning environment while developing the skills needed to become the strong, upstanding leaders of the future: creativity, innovation, confidence, adaptability, effective communication skills, resilience, and an understanding of the importance of giving back to your community. Pathways continues in this format through to grade 10, followed by opportunity to pursue additional enriched courses in grade 11 and 12.

### Pathways Selection Criteria

This program is geared towards students who demonstrate academic diligence, the ability to act positively and effectively in a variety of social situations, and the drive to assume leadership roles both in the school and in the community. The selection process for this program is based on a desire to pursue leadership opportunities in the school and community, social maturity and strong interpersonal skills, and academic ability and effective work habits. Students will be required to submit an application package, which includes a personal statement outlining their interest in the program, an application form, a teacher recommendation checklist, and a current report card indicating a minimum achievement level of C+ (this level of achievement is necessary given the demands of the program). In addition, all applicants will participate in an interview and team building event with the Pathways Team.

*Application packages (online) must be received by **January 30, 2020**. Interviews will take place at feeder schools and the team building event will take place at Cambie will both occur in February (dates TBD).*

**Pathways 8** is the entry-level foundation of the larger Pathways 8 - 10 Program at Cambie. The focus in Gr. 8 is on critical thinking, learning about the attributes of effective leadership, understanding leadership styles, goal setting, teamwork, organizational skills, developing strong work habits, exploring areas of passion, and self-regulation.

**Pathways 9** follows the same structural format, incorporating content designed to meet the enriched learning outcomes of Grade 9. Students in Grade 9 build on their learning from Grade 8, with a focus on building effective relationships, understanding learning styles and personal strengths, taking risks and being resilient, taking initiative, and supporting the needs of others.

**Pathways 10** includes the same 4 core subject courses with a variety of elective choices. Students in Grade 10 focus on the application of their learning from Grade 8 & 9 by putting their leadership into action. Students focus on collaboration, taking initiative and utilizing the strengths of a group.





## H.J. Cambie Secondary School Pathways Program

### GRADE 8

#### Pathways Courses:

- English Language Arts 8
- Physical & Health Education 8
- Science 8
- Social Studies 8

#### Supplementary Courses:

- Mathematics 8
- Art 8, Drama 8 or Music 8
- Applied Design, Skills and Technologies (Home Ec. / Tech. Ed)
- French 8

### GRADE 9

#### Pathways Courses:

- English Language Arts 9
- Physical & Health Education 9
- Science 9
- Social Studies 9

#### Supplementary Courses:

- Mathematics 9
- One Fine Arts Elective: Art, Music, and Theatre options
- One Applied Design, Skills & Technologies or Business Elective
- One Modern Language

### GRADE 10

#### Pathways Courses:

- Composition & Literary Studies 10
- Physical & Health Education 10
- Science 10
- Social Studies 10

#### Supplementary Courses:

- Foundations of Math & Pre-Calculus 10
- Three Elective Options: Art, Business, Home Ec., Modern Languages, Music, Technology, Theatre, and Specialty Courses

### Grade 11/12

A wide variety of courses are available in Grade 11/12 for students in the Pathways Program to select. Students have greater flexibility and options in Grade 11/12 to allow them to pursue their interests and passions and to enrol in courses that will provide the prerequisites for post-secondary program options. We encourage students to consider requesting Advanced Placement (AP), Enriched and Honours courses as well as Recreation Leadership 11/12.

Grade 11/12 Pathways students are also encouraged to support the program by pursuing leadership and mentorship opportunities with Grade 8-10 Pathways events, projects and trips.





## **Work Experience (WEX 12A)**

Work Experience is intended to help prepare students for the transition from secondary school to the world of work or further education and training. A major component of any WEX Program is community-based work/volunteer experience (4 credits). Students may choose a work experience placement from a wide variety of occupational fields based on their career goals and career focus area of interest. To receive course credit, students must complete at least 90 hours of on-the-job work/volunteer experience and 10-30 hours of in-class learning activities. Students must also be under the supervision of a teacher, in addition to an employer who has agreed to work with the school in providing a realistic work experience. WEX 12A includes the required workplace safety training a student must complete prior to the actual work experience placement.

The work experience component of a WEX Program will provide an opportunity for students to learn to assume responsibility, to gain knowledge and attitudes necessary for successful job performance, to acquire good work habits, to develop an understanding and appreciation of the relationship between formal education and job success, to learn how to work cooperatively with fellow workers, and to put into practice skills learned in school.

These courses are not intended as "instant credits" for students who have a part-time job. The time given to work experience may be within the timetable or outside of the timetable. Care will be taken to limit the loss of class time during work placements. After school, weekends, school professional development days, and possibly even holidays may be used for work experience. Work experience hours also enable students to fulfill graduation requirements for 30 hours of work or volunteer experience.





## **Business Education**

The Business Education Department offers two Work Experience Programs as listed below. The Work Experience Program offers an opportunity for students to practice school-based learning in a business environment. The program opens doors to employment and post-secondary opportunities at local colleges and universities. Students take three related Business Education courses and complete substantial hours of work experience. The program integrates courses in a meaningful way to help students broaden their education, and to bridge the gap between school and work. Where enrollment is limited, these programs may have priority registration.

### **1. Accounting:**

Related Career Opportunities:

Accounting, Accounting Clerk, Financial Administrator, Law, Banking, Economist, Business Administrator, Office Administrator, Government, Medical Office Assistant, Marketing Management, Clerical, International Business, Executive Assistant

*Required Courses:*

Accounting 11

Pre-Calculus Math 11

Accounting 12 or Financial Accounting 12

Career Preparation Work Experience 12

### **2. Marketing:**

Related Career Opportunities:

Marketing Management, Sales Executive, International Business Advertising Executive, Retailing, Executive Assistant, Merchandising, Marketing Research, Financial Administration, Government, Business Administration, Business Law, Office Administration, Artist

*Required Courses:*

Marketing 11

E-Commerce 12

Career Prep Work Experience 12





## **Introduction to Medical Science 11 and 12**

This program will give students the theoretical background and practical experience necessary to pursue careers related to the Health Science field.

The Introduction to Medical Science Program provides students with opportunities to:

- Develop employment skills and gain practical experience in Health Science
- Explore potential career options
- Relate in-school curriculum to the workplace

### *Related Career Opportunities:*

Registered Nurse, Physician, Physiotherapist, Recreation Therapist, Dentist, Fitness Trainer, Community Health Care, Occupational Therapist, Social Worker, Medical Lab Technician, Nutritionist, Veterinarian, First Aid Attendant, Massage Therapist, Pharmacist and Paramedicine.

### *Required Courses:*

Life Science 11, Chemistry 11, or Physics 11 (students must have completed one of these 3 sciences as a prerequisite).

Introduction to Medical Science 12

Work Experience 12

### *And one of the following:*

Chemistry 11 or 12

Food Studies 11 or 12

Physics 11 or 12

Physical & Health Education 11 or 12

Life Science 11 or Anatomy and Physiology 12

## **Recreation Leadership**

Prerequisite to this program are the completion of PHE 10, and the completion of a Recreation Leadership application with subsequent acceptance in to the program. Students are required to complete the following as a member of the Recreation Leadership Work Experience Program:

- 1) Work Experience – a minimum of 100 hours of volunteer work experience in an area of Recreation or Athletics that takes place off site (not at Cambie School), with an approved supervisor.
- 2) Work Experience Evaluation – Students must complete an evaluation for their work experience, which includes employer evaluations, self-evaluations, an updated resume, and a work experience log sheet.

Related Career Opportunities: Teacher, Event Planner, Sport (youth or adult) Coordinator, Coach, Management, Chef de Mission, Executive Director, Referee, Fitness Trainer, etc.

\*Skills used in this program and course are transferable to all aspects of life.





# Cambie Secondary - Program Planning Book



## District Career Programs Office Team

- District Coordinator – Career Programs: **Terri Lockhart**
- District Facilitator – Career Programs: **David Henderson** (1/2 time)
- District Facilitator – Career Programs: **Peter Thackwray** (Day 2½)
- District Facilitator – Work in Trades: **Harrison Brown**
- Administrative Assistant – Career Programs: **Suzanne Mah**

### Questions for the team?

Email: [careerprograms@sd38.bc.ca](mailto:careerprograms@sd38.bc.ca)

For specific dates and details of events and application/registration due dates, check the Career Programs website or call 604-668-6000 ext 3766.

Also, check the Career Programs information board in your school's counselling area.

## RCMP Youth Squad

SD38 Gr. 10 – 12's apply to learn about emergency services  
Oct. – Dec. - 8 consecutive Thursdays 6:00-9:00pm

## RCMP Youth Academy

Career simulation open to current Gr. 11/12 students  
8 days/nights @ Camp Stillwood in Spring  
Apps due end of November

## STEP Skilled Trades Exploration Program

Gr. 11/12 students work 1 week alongside  
SD38 trades personnel in Spring  
Should have interest in trades as career option  
Apps due end of January

## Link38

Gr. 12's take KPU course and earn post-secondary  
credit while in high school  
Tuition is paid by SD38  
Apps due May

## Parents as Career Coaches

Evening for secondary school parents to learn how  
to be career coaches for their children  
Choose from one of two dates this year – check District PAC  
or Career Programs website to register

## Youth Train in Trades Program Site Visits/Workshops

See Youth Train in Trades programs in action  
Contact the Career Programs Office to arrange a tour  
Check our website for specific upcoming events

## SD38 Career Programs Office

c/o Cambie Secondary School, 4151 Jacombs Road,  
Richmond, BC V6V 1N7



**CAREER  
PROGRAMS**  
SCHOOL DISTRICT NO. 38 (SD38)

**RICHMOND**  
SCHOOL DISTRICT NO. 38

ita | YOUTH  
**TRAIN**  
IN TRADES

ita | YOUTH  
**WORK**  
IN TRADES



Ministry of  
Education

**[careerprograms.sd38.bc.ca](http://careerprograms.sd38.bc.ca)**





## **Online Programs**

Students can take courses at Cambie as well as online through the **Richmond Virtual School (RVS)**. RVS is a Distributed Learning secondary school that offers a variety of courses. It uses a hybrid model of online and face-to-face interaction to deliver high quality and dynamic learning opportunities.

The RVS Distributed Learning program provides flexibility and choice for students, teachers, and schools. Students will have the flexibility of learning anytime/anywhere and will have greater choice in courses available. As independent learners, students will also benefit by developing life-long learning skills that will be useful in other online learning opportunities that they will encounter in their future.

RVS currently provides free academic and elective courses in grades 10 to 12. Students can take one or more courses through RVS and still be registered in their home school. For more information visit the RVS website at: [RichmondVirtualSchool.ca](http://RichmondVirtualSchool.ca).





**RICHMOND  
VIRTUAL SCHOOL**



## Courses Offered by RVS

Biology 11, 12  
Calculus 12  
Cybersecurity 11, 12  
Chemistry 11, 12  
Career Life Education 10  
Dance 10-12  
Economics 12  
English 11, 12  
Foods and Nutrition L3, L4  
Foundations and Pre-Calculus 10  
Foundations of Math 11, 12  
French 11, 12  
Geography 12  
Geometry 12  
History 12  
History of Math 11  
Mandarin 11, 12  
Outdoor Education 11, 12  
Physics 11, 12  
Pre-Calculus Math 11, 12  
Psychology AP12  
Social Studies (Explorations) 11  
Statistics 12  
Writing 12  
Young Entrepreneur Leadership

The **Richmond Virtual School** (RVS) is a Distributed Learning secondary school that uses a blended model of online and face-to-face interaction to deliver high quality and dynamic learning opportunities to Richmond students. We have one of the highest success rates in BC.

Our blended Learning approach provides more choices for students, teachers, and schools. RVS students have the flexibility to learn the course content at a time that works for them. As independent learners, students will also benefit from developing life-long learning skills that will prove useful in other online learning opportunities.

We provide free academic and elective courses in grades 10 to 12. Students can take one or more courses through RVS and still be registered in their home school. We also offer a personalized project based learning program, for grade 11 and 12 students, called **SKY**. This year we are extending the sky program to include grade 8 students in our new program called **RAIL**. See our website for more information on the **SKY** and **RAIL** programs as well as our online courses.



**SKY** NO LIMITS

@RICHMONDVIRTUALSCHOOL.CA

Register at

**[RichmondVirtualSchool.ca](http://RichmondVirtualSchool.ca)**

Contact us: [rvs@sd38.bc.ca](mailto:rvs@sd38.bc.ca)

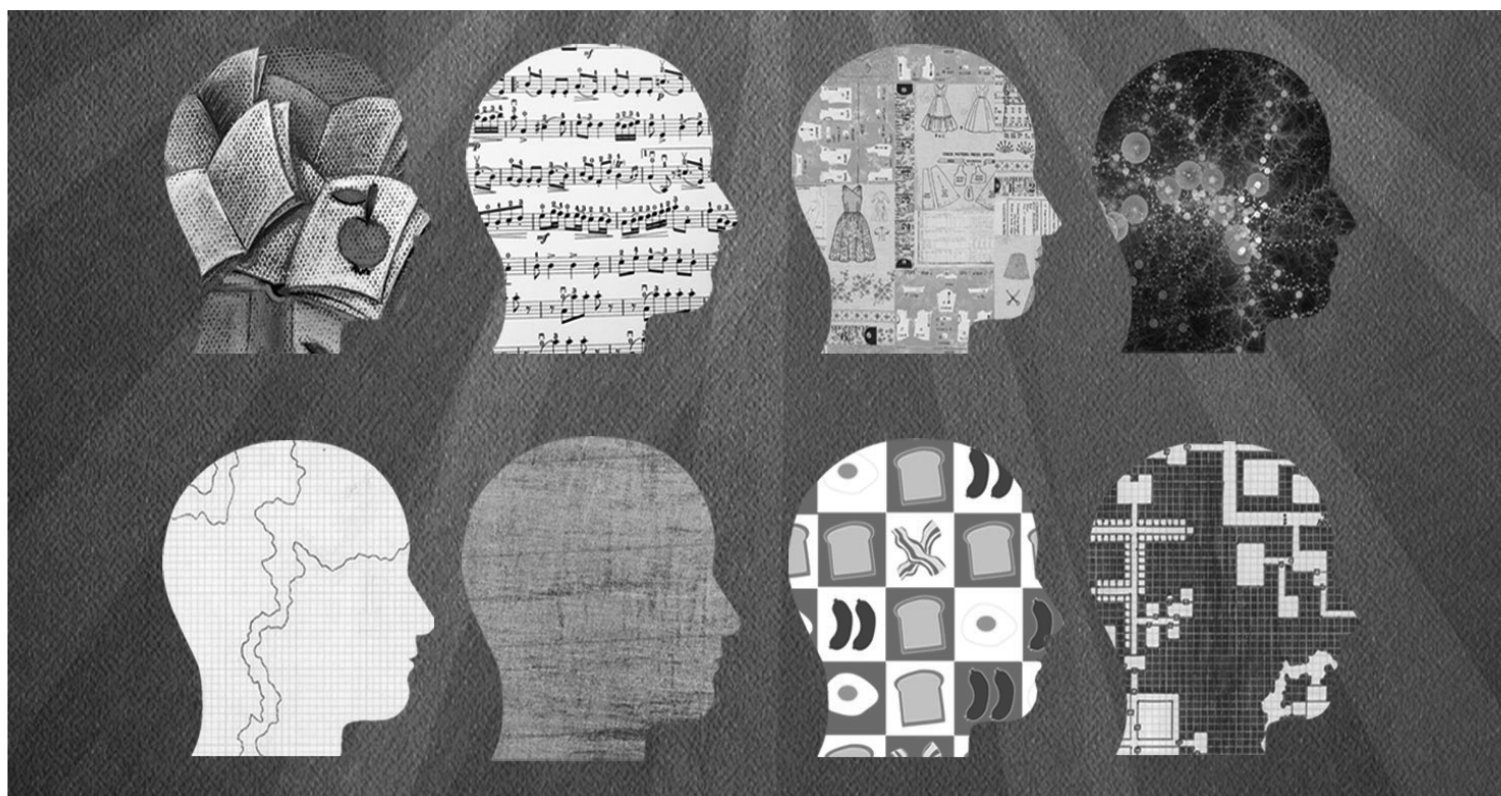
**604-668-6371**



**RAIL** | RICHMOND ACADEMY of  
INNOVATIVE LEARNING



# Cambie Course Catalogue





# Cambie Secondary - Program Planning Book



The course catalogue is a list of all of the courses offered at Cambie Secondary. It is important to understand that courses will be offered based on student demand; as a result, some of the courses in the catalogue may not run next year.

Students will be able to view the course code, title, and description of each course. Please read carefully the prerequisites, grade level, and course description of each course before making a course selection.

SS: SOCIAL STUDIES 9	COURSE TITLE	COURSE DESCRIPTION
Prerequisite: Social Studies 8		
The Social Studies 9 area of learning spans from the years <b>1750 - 1919</b> . In this course, it is our hope that students learn more about themselves, each other, and the world we inhabit. In this course, we hope that students develop critical thinking skills and come to know how Canada has been influenced by the <b>Big Ideas</b> of environment, power, ideas, and identity. This would include developing an understanding of the connections between the past, present, and future, as well as, the people, events, and trends that have shaped the development and evolution of societies, especially our own. A complete understanding of Canada's past and present includes developing an understanding of the history and culture of Canada's First Peoples.		

Courses are sorted by department and then by alpha. Students are encouraged to view the course catalogue online at our website – <http://hjcambie.sd38.bc.ca/>.

## Course Catalogue Index

Art	21	Physical & Health Education	44
Business Education	27	Resource	47
English	29	Science	48
English Language Learning (ELL)	32	Social Studies	51
Home Economics	34	Specialty Courses	53
Mathematics	36	Technology Education	56
Modern Languages	39	Theatre	65
Music	42		



### AR: ART STUDIO 8

Do you love to draw, paint, sculpt, and create...or maybe just improve your skills with some new and crazy techniques? Then this is the course for you! Art 8 is a "little bit of everything" course, and provides a great background for future art courses in Art Studio, Studio Arts 2D, Studio Arts 3D, and Photography. Projects include a fun variety of drawing and painting projects, collage, clay, paper mache, wire...you name it, we can create with it!

The Cambie art studios provide a creative, fun and supportive place for students to explore new skills and to enjoy and appreciate their own work and the creations of others. Come join the creative chaos!

### AR: ART STUDIO 9

**Prerequisite: None**

Art Studio 9 is designed for students with an interest in exploring a wide variety of art making techniques and materials in a fun and creative studio environment! Processes will include both 2D and 3D techniques (drawing, painting, collage and a range of sculptural materials) while exploring an interesting range of themes. Topics and approaches in this course change every year – it is possible to continue in this course in later grades without repeating projects. Come see where the power of your imagination can take you!

### AR: ART STUDIO 10

**Prerequisite: None**

Art Studio 10 is designed for students with an interest in exploring a wide variety of art making techniques and materials in a fun and creative studio environment! Processes will include both 2D and 3D techniques (drawing, painting, collage and a range of sculptural materials) while exploring an interesting range of themes. Topics and approaches in this course change every year – it is possible to continue in the course in later grades without repeating projects. Come see where the power of your imagination can take you!

### AR: ART STUDIO 11

**Prerequisite: None**

Art Studio 11 is designed for students with an interest in exploring a wide variety of art making techniques and materials in a fun and creative studio environment! Processes will include both 2D and 3D techniques (drawing, painting, collage and a range of sculptural materials) while exploring an interesting range of themes. Topics and approaches in this course change every year – it is possible to continue in the course in later grades without repeating projects. Come see where the power of your imagination can take you!

Art Studio 11 is suitable for students in grade 11/12 who are new to art as well as those who have previous art experience.

### AR: ENRICHED ART STUDIO 11

**Prerequisite: Art 10 strongly recommended, or teacher recommendation.**

Art 11 Enriched is a course designed for students who wish to pursue art or art related courses at the post-secondary level or for students who simply love and excel at art making! Art 11 Enriched focuses on the development of a personal style, the improvement of the fundamental skill sets required of all artists (Elements and Principles of Design), and on the development of a portfolio-worthy body of work. The artistic development initiated in Art 11 Enriched can be continued into AP Art 12 for students wishing to continue their artistic focus. (Please see the Art 12 AP course description.) Students will explore a wide range of materials including drawing, painting, clay, paper mache, collage, ink, printmaking, and mixed media in a challenging but supportive studio environment.





### AR: ART STUDIO 12

**Prerequisite:** Any Grade 11 Art course

Art Studio 12 is a senior general art survey course, providing the opportunity for anyone with an interest in art to continue to grow their skills and appreciation. As in earlier Art Studio courses, students explore a variety of 2D and 3D techniques and materials and a wide range of themes, but with a more sophisticated approach and more independent motivation. Personal responses to projects and original solutions to artistic problems will be expected and encouraged. Topics and approaches in this course change every year – it is possible to enroll in the course despite having completed previous levels.

### AR: AP PORTFOLIO 12

**Prerequisite:** Art Enriched 11 or Art 11 with teacher recommendation or Photo Level 3 with teacher recommendation.

Advanced Placement Art and Design 12 is for highly motivated students who are seriously interested in the study of art and art making. The program demands a significant personal commitment. AP is an intensive course and requires more time than a regular art class. Students will need to work outside the classroom, as well as in it, and beyond scheduled periods. Homework, such as maintaining a sketchbook, is a necessary component of instruction. It is highly recommended that AP Studio Art students have previous training in art (such as Art Enriched 11, other Cambie art or photography courses, or outside classes such as those offered by the Richmond Art Gallery).

AP Art 12 gives high school students the opportunity to receive Advanced Placement credit at participating universities (often equivalent to first year course credits - please see your counsellor for more details) upon successful completion and evaluation of the student's portfolio by the Advanced Placement Faculty Consultants (based in Princeton, NJ) in May. It is not required that students submit a portfolio to the AP Board, but all students are required to complete a final portfolio for school-based evaluation in June. Experience has proven that most students require two senior art courses, in addition to devoting many additional hours outside of class, to complete portfolios that earn more than a mere pass by the AP Board.

### AR: STUDIO ARTS 2D 9

**Prerequisite:** None

Do you love to draw, paint, sketch or collage? Are you hoping to improve your art skills ...while having a ton of fun in a supportive and engaging studio environment? Then this is the course for you! Students in Studio Arts 2D 9 are introduced to a range of drawing, painting and image making techniques and materials including pencil, paint, charcoal, conte, collage, ink, printmaking, watercolour, and mixed media. Focus will be on the development of an understanding of the Elements and Principles of Art (colour, form, shape, tone, line, unity, balance, movement, etc) and how to better utilize them to improve our artwork. Students will explore both contemporary and historical artists, styles, and ideas, and will be encouraged to find personal connections/responses to your projects and explorations. Topics and approaches in this course change every year – it is possible to continue in Studio Arts 2D in later grades without repeating projects. Join us in the studio and learn to create art that stops viewers in their tracks!

### AR: STUDIO ARTS 2D 10

**Prerequisite:** None

Do you love to draw, paint, sketch or collage? Are you hoping to improve your art skills ...while having a ton of fun in a supportive and engaging studio environment? Then this is the course for you! Students in Studio Arts 2D 10 are introduced to a range of drawing, painting and image making techniques and materials including pencil, paint, charcoal, conte, collage, ink, printmaking, watercolour, and mixed media. Focus will be on the development of an understanding of the elements and principles of art (colour, form, shape, tone, line, unity, balance, movement, etc.) and how to better utilize them to improve our artwork. Students will explore both contemporary and historical artists, styles, and ideas, and you will be encouraged to find personal connections/responses to your projects and explorations. Topics and approaches in this course change every year – it is possible to continue in the course in later grades without repeating projects. Join us in the studio and learn to create art that stop viewers in their tracks!



### AR: STUDIO ARTS 2D 11

**Prerequisite: None**

Do you love to draw, paint, sketch or collage? Are you hoping to improve your art skills ...while having a ton of fun in a supportive and engaging studio environment? Then this is the course for you! Students in Studio Arts 2D 11 are introduced to a range of drawing, painting and image making techniques and materials including pencil, paint, charcoal, conte, collage, ink, printmaking, watercolour, and mixed media. Focus will be on the development of an understanding of the elements and principles of art (colour, form, shape, tone, line, unity, balance, movement, etc.) and how to better utilize them to improve our artwork. Students will explore both contemporary and historical artists, styles, and ideas, and you will be encouraged to find personal connections/responses to your projects and explorations. Topics and approaches in this course change every year – it is possible to continue in the course in later grades without repeating projects. Join us in the studio and learn to create art that stop viewers in their tracks!

Studio Arts 2D 11 is suitable for students in grade 11/12 who are new to art as well as those who have previous art experience.

### AR: STUDIO ARTS 2D 12

**Prerequisite: Any Grade 11 Art course**

This course offers senior art students an opportunity to further refine their skills in pencil, paint, charcoal, conte, collage, ink, printmaking, watercolour, and mixed media. You will be invited to challenge yourself, to try new techniques, and to direct some of your own exploration. Personal responses to projects and original solutions to artistic problems will be expected and encouraged. Topics and approaches in this course change every year – it is possible to enroll in the course despite having completed previous levels.

### AR: STUDIO ARTS 3D 9

**Prerequisite: None**

Studio Arts 3D 9 is designed for students with an interest in sculptural art and a desire to see their creative ideas evolve in a fun and supportive studio environment! Students work with an ever-rotating variety of techniques and materials (including clay, plaster, cardboard, found objects, wire, paper mache and more!) while exploring a wide range of artistic themes. Topics and approaches in this course change every year – it is possible to continue in Studio Arts 3D in later grades without repeating projects. Come join the creative chaos!

### AR: STUDIO ARTS 3D 10

**Prerequisite: None**

Studio Arts 3D 10 is designed for students with an interest in sculptural art and a desire to see their creative ideas evolve in a fun and supportive studio environment! Students work with an ever-rotating variety of techniques and materials (including clay, plaster, cardboard, found objects, wire, paper mache and more!) while exploring a wide range of artistic themes. Topics and approaches in this course change every year – it is possible to continue in this course in later grades without repeating projects. Come join the creative chaos!

### AR: STUDIO ARTS 3D 11

**Prerequisite: None**

Studio Arts 3D 11 is designed for students with an interest in sculptural art and a desire to see their creative ideas evolve in a fun and supportive studio environment! Students work with an ever-rotating variety of techniques and materials (including clay, plaster, cardboard, found objects, wire, paper mache and more!) while exploring a wide range of artistic themes. Topics and approaches in this course change every year – it is possible to continue in this course in later grades without repeating projects. Come join the creative chaos!

Studio Arts 3D 11 is suitable for students in grade 11/12 who are new to art as well as those who have previous art experience.



### AR: STUDIO ARTS 3D 12

**Prerequisite:** Any Grade 11 Art course

This senior course builds on previous sculptural experiences in using materials and techniques to make exciting 3D artwork (See course descriptions for Studio Arts 3D 9, 10, 11). Senior students are invited to challenge themselves, to try new techniques, and to direct some of their own exploration. Personal responses to projects and original solutions to artistic problems will be expected and encouraged. Energy, originality, and a disciplined approach to this course is valued. Topics and approaches in this course change every year – it is possible to enroll in the course despite having completed previous levels.

### AR: PHOTO 9

**Prerequisite:** None

We are an image-based society...ever wonder what goes into making a photographic image really exciting and not just another "snapshot" or "selfie"?

Photography 9 introduces students to the basics of camera operations, effective composition, and both digital (Photoshop) and traditional film/darkroom techniques. Students will explore the medium of photography from both a technical and artistic vantage point, with emphasis on creating effective, imaginative, and eye-catching images. Students will also explore the possibilities for artistic manipulation of their photographs in the form of paintings, collage, hand tinting/toning, digital manipulation and more. This course is suitable for students who intend to pursue photography, filmmaking, graphic design, visual arts...or for those who simply have a curiosity and desire to improve their skills in a fun environment!

Note: Students should have access to a digital camera. A quality cellphone will suffice, *although a digital SLR camera would be an asset*. A film based, 35mm camera will also be utilized. Minimal supplies will be provided to students. Should a student wish to use optional materials to enhance or to elaborate upon the learning outcomes, these may be purchased directly or through the school on a cost-recovery basis.

### AR: PHOTOGRAPHY 10

**Prerequisite:** None.

**Photography 10 is designed for both NEW and RETURNING Photography students. Course "level" will be assigned by the instructor in September – based on previous Photography experience.**

We are an image-based society...ever wonder what goes into making a photographic image really exciting and not just another "snapshot" or "selfie"?

NEW Photography Students (Level 1) cover the basics of camera operations, effective composition, and both digital (Photoshop) and traditional film/darkroom techniques. Students will explore the medium of photography from both a technical and artistic vantage point, with emphasis on creating effective, imaginative, and eye-catching images. Students will also explore the possibilities for artistic manipulation of their photographs in the form of paintings, collage, hand tinting/toning, digital manipulation and more. This course is suitable for students who intend to pursue photography, filmmaking, graphic design, visual arts...or for those who simply have a curiosity and desire to improve their skills in a fun environment!

RETURNING Photography Students (Level 2) build on the foundation skills acquired in their previous course, with an increasing emphasis on the development of an *individual style* – "What makes your photos truly unique and *personal*"? Students will experiment with advanced camera techniques to produce images that convey their growing sense of strong composition, emotional/artistic connection, and technical mastery. Projects will include a look at the concepts of graphic design, high fashion photography, portraiture, still life, special effects, and more, with an emphasis on creative responses. Both digital (Photoshop) and traditional film/darkroom techniques are explored and expanded.

Note: Students should have access to a digital camera. A quality cellphone will suffice, *although a digital SLR camera would be an asset*. A film based, 35mm camera will also be utilized. Minimal supplies will be provided to students. Should a student wish to use optional materials to enhance or to elaborate upon the learning outcomes, these may be purchased directly or through the school on a cost-recovery basis.



### AR: PHOTOGRAPHY 11

**Prerequisite: None.**

**Photography 11 is designed for both NEW and RETURNING Photography students. Course "level" will be assigned by the instructor in September – based on previous Photography experience.**

We are an image-based society...ever wonder what goes into making a photographic image really exciting and not just another "snapshot" or "selfie"?

NEW Photography Students (Level 1) cover the basics of camera operations, effective composition, and both digital (Photoshop) and traditional film/darkroom techniques. Students will explore the medium of photography from both a technical and artistic vantage point, with emphasis on creating effective, imaginative, and eye-catching images. Students will also explore the possibilities for artistic manipulation of their photographs in the form of paintings, collage, hand tinting/toning, digital manipulation and more. This course is suitable for students who intend to pursue photography, filmmaking, graphic design, visual arts...or for those who simply have a curiosity and desire to improve their skills in a fun environment!

RETURNING Photography Students (Level 2) build on the foundation skills acquired in their previous course, with an increasing emphasis on the development of an *individual style* – "What makes your photos truly unique and *personal*"? Students will experiment with advanced camera techniques to produce images that convey their growing sense of strong composition, emotional/artistic connection, and technical mastery. Projects will include a look at the concepts of graphic design, high fashion photography, portraiture, still life, special effects, and more, with an emphasis on creative responses. Both digital (Photoshop) and traditional film/darkroom techniques are explored and expanded.

THIRD YEAR Photography Students (Level 3) should be committed to perfecting their skills both technically and creatively. It is expected that students enrolled in at this level have a firm grasp of beginning and advanced photo techniques (both traditional and digital). Level 3 is extremely self-directed and requires a dedicated and motivated student who understands the time demands necessary for excellent results. Students will be asked to pursue their own creative ideas with vigour and to seek out creative and original solutions to photographic problems. Not only will students in Level 3 be creating a portfolio that displays breadth and quality, they will also search out their own artistic style and voice.

Note: Students should have access to a digital camera. A quality cellphone will suffice, *although a digital SLR camera would be an asset*. A film based, 35mm camera will also be utilized. Minimal supplies will be provided to students. Should a student wish to use optional materials to enhance or to elaborate upon the learning outcomes, these may be purchased directly or through the school on a cost-recovery basis.



### AR: PHOTOGRAPHY 12

**Prerequisite:** Photography 11

**Photography 12 is designed for RETURNING Photography students. Course "level" will be assigned by the instructor in September – based on previous Photography experience.**

We are an image-based society...ever wonder what goes into making a photographic image really exciting and not just another "snapshot" or "selfie"?

RETURNING Photography Students (Level 2) build on the foundation skills acquired in their previous course, with an increasing emphasis on the development of an *individual style* – "What makes your photos truly unique and *personal*"? Students will experiment with advanced camera techniques to produce images that convey their growing sense of strong composition, emotional/artistic connection, and technical mastery. Projects will include a look at the concepts of graphic design, high fashion photography, portraiture, still life, special effects, and more, with an emphasis on creative responses. Both digital (Photoshop) and traditional film/darkroom techniques are explored and expanded.

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Note: Students should have access to a digital camera. A simple "point and shoot" automatic or quality cellphone will suffice, *although a digital SLR camera would be an asset*. A film based, 35mm camera will also be utilized. Minimal supplies will be provided to students. Should a student wish to use optional materials to enhance or to elaborate upon the learning outcomes, these may be purchased directly or through the school on a cost-recovery basis.





### BE: ENTREPRENEURSHIP & MARKETING 10

Prerequisite: None

This course has been designed as an introduction to the Business Education curriculum. Topics discussed include: Business communications, Business Law, marketing, advertising, communications, economics, accounting, and banking. There is a general focus on entrepreneurship and promotion. Students will have the opportunity apply their business knowledge to developing and implementation a business plan and sales challenge. After completing Business Education 10, students will have acquired a basic understanding of the fundamentals for business education courses available in grades 11 and 12.

### BE: ACCOUNTING 11

Prerequisite: Math 10 recommended  
Fee: \$25.00 workbook recommended

This course is designed as an introduction to accounting concepts for those students seeking entry-level employment skills or a post-secondary commerce option. Topics to be covered are: general ledger, journal entries, trial balance, financial statements: income statement and balance sheet, worksheets and closing entries. This course provides students with the opportunity to use the computer in all financial problems. This is a useful course for students who expect to pursue employment in business immediately upon high school graduation. Students who intend to complete a university degree, college business diploma, or a professional accounting degree are also strongly advised to take this course.

### BE: ACCOUNTING 12

Prerequisite: Accounting 11

This course stresses the practical application of the principles taught in Accounting 11 using more advanced procedures and techniques. Accounting 12 enables students to use industry-standard computer software (Account Edge) to analyze and solve accounting problems and to produce accounting reports. This course is useful for any student who intends to seek employment in business directly following high school graduation. Topics covered are Merchandising Business, Fixed Assets, Corporations, Depreciation, Bank Reconciliations, Internal Control, Payroll Accounting, and Financial Analysis. Students who intend to complete a university degree, college business diploma, or a professional accounting degree are also strongly advised to take this course.

### BE: FINANCIAL ACCOUNTING 12

Prerequisite: Math 10 recommended  
Fee: \$25.00 workbook recommended

This course is intended for students who wish to pursue post-secondary studies in accounting, finance, business management, or commerce. Advanced concepts of financial accounting encourage students to develop analytical, decision-making skills and communication skills. Accounting skills are also useful to students intending to pursue professions other than business. Students who intend to complete a university degree, college business diploma, or a professional accounting degree are also strongly advised to take this course.

### BE: MARKETING AND PROMOTION 11

Prerequisite: None

Students will evaluate methods used by businesses to inform markets of their products, services, and ideas. They will also examine the influence of various cultures on the way businesses conduct marketing. Topics may include marketing research, market segmentation, product development, pricing strategy, and AIDA. Projects, presentations, activities and field trips will be used to develop an understanding about the methods used to attract customers to products and services. Students will be involved in the running of a student based school business by deciding which products will be sold and then order, price, market, and retail store merchandise. Designing and selling of Cambie Gear is an option.



### **BE: E-COMMERCE 12**

Prerequisites: Marketing 11 or Accounting 11 are strongly recommended.

This is an introductory course which will provide an overview on all aspects of Electronic Commerce and opportunity in the virtual business place. Topics may include e-Commerce Infrastructure and Evolution, Digital Business strategies, e-Commerce Systems Analysis and Design, Distribution and Supply Chain Management, Cyber Marketing Strategies, Electronic Payment Systems, Legal and Ethical Issue in e-commerce. Students will have the opportunity to design, construct, test and apply e-Commerce business principles to a school based business opportunity. Designing and selling of grad clothing using an online business platform may be an option.

### **BE: ECONOMICS 12**

Prerequisites: Social Studies 11 is strongly recommended.

This course is an introduction to economic theory, the Canadian economy and global trends. It deals with the economic relationships between nations. It covers topics such decision making economics systems, recessions, unemployment, inflation, foreign ownership, income distribution, the relationship between supply and demand, economics growth and international trade. EC 12 examines the roles of the major players on the economic scene: consumers, investors, business, labour and government. Students planning to enter the Faculty of Commerce/Business Administration in post-secondary studies will find this course very helpful. Economics 12 is a university entrance approved course for most institutions in Canada.

### **BE: WORK EXPERIENCE ACCOUNTING**

Please see the Work Experience section of the Cambie Program Planning book.

### **BE: WORK EXPERIENCE MARKETING**

Please see the Work Experience section of the Cambie Program Planning book.



## EN: ENGLISH LANGUAGE ARTS 8

The English Language Arts 8 Program is developed around seven principles:

1. Language and text can be a source of creativity and joy.
2. Exploring text and story helps us understand ourselves and make connections to others and to the world.
3. Developing our understanding of how language works allows us to use it purposefully.
4. Purpose, audience and context guide the author's choices in the construction of text.
5. Language can shape ideas and influence others.
6. People understand texts differently depending on their worldviews and perspectives.
7. Texts are socially, culturally, and historically constructed.

Students will develop a basic understanding of the fundamentals of the English language, as well as develop and refine strong writing, listening, speaking, and reading skills. A wide variety of novels, short stories, and works of non-fiction will be used.

## EN: ENGLISH LANGUAGE ARTS 8 PATHWAYS

Students will follow the same curricular program as English Language Arts 8, but will have enriched opportunities, such as fieldtrips and special projects, to further explore areas of interest.

## EN: ENGLISH LANGUAGE ARTS 9

Prerequisite: English Language Arts 8

The English Language Arts 9 Program is developed around six principles:

1. Language and text can be a source of creativity and joy.
2. Exploring text and story helps us understand ourselves and make connections to others and to the world.
3. Exploring and sharing multiple perspectives extends our thinking.
4. Developing our understanding of how language works allows us to use it purposefully.
5. Texts are created for different purposes and audiences.
6. Synthesizing the meaning from different texts and ideas helps us create new understandings.

Students will continue to develop the communication skills of listening, speaking, reading, and writing. They will explore more challenging works of literature in a variety of forms and genres. Students will learn to recognize and write different types of paragraphs, using a sequential process of writing instruction, and will work on multi paragraph compositions.

## EN: ENGLISH LANGUAGE ARTS 9 PATHWAYS

Prerequisite: English Language Arts 8

Students will follow the same curricular program as English Language Arts 9, but will have enriched opportunities, such as fieldtrips and special projects, to further explore areas of interest.



### EN: COMPOSITION & FOCUSED LITERARY STUDIES 10

Students will receive the 4 credits needed to meet the requirements of this program by successful completion of the following 2 modules, offered over the course of the school year -

#### 1) Composition 10 (2 Credits)

Prerequisite: English Language Arts 9

Composition 10 is designed for students who have an interest in developing their skills in written communication in a variety of contexts. The course provides students with opportunities to think critically as they explore, extend, and refine their writing. Within a supportive community of writers, students will work individually and collaboratively to explore and create coherent, purposeful compositions. They will develop their craft through processes of drafting, reflecting, and revising to build a body of work that demonstrates breadth, depth, and evidence of writing for a range of situations. The course provides opportunities for diverse learners to be supported in developing and refining their writing abilities.

The following are possible areas of focus within Composition 10:

- narrative, expository, descriptive, persuasive, and opinion pieces
- planning, drafting, and editing processes
- writing for specific audiences and specific disciplines
- how to cite sources, consider the credibility of evidence, and evaluate the quality and reliability of the **source**

#### 2) Focused Literary Studies 10 (2 credits)

Focused Literary Studies 10 is designed for students who are interested in the literature of a particular era, geographical area, or theme, or in the study of literature in general. The course allows students to delve more deeply into literature as they explore specific themes, periods, authors, or areas of the world through literary works in a variety of media. Giving students the choice of a range of literary topics allows them to follow their passion and at the same time:

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

The following are possible areas of focus in Focused Literary Studies 10:

- Genre-specific studies — poetry, short stories, novels, drama, graphic novels, children's literature
- Canadian literature
- First Peoples texts
- thematic studies
- specific author studies

### EN: COMPOSITION & FOCUSED LITERARY STUDIES 10 PATHWAYS

Prerequisite: English Language Arts 9

Students will follow the same curricular program as Composition & Focused Literary Studies 10, but will have enriched opportunities, such as fieldtrips and special projects, to further explore areas of interest.

### EN: ENGLISH STUDIES 11

Prerequisite: Composition & Focused Literary Studies 10

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

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



### EN: ENGLISH STUDIES 12

Prerequisite: Literary Studies 11

The required English Studies 12 course builds on and extends students' previous learning experiences in ELA and EFP 10 and 11 courses. It is designed for all students and provides them with opportunities to:

- refine their ability to communicate effectively in a variety of contexts and to achieve their personal and career goals
- think critically and creatively about the uses of language
- explore texts from a variety of sources, in multiple modes, and that reflect diverse worldviews
- deepen their understanding of themselves and others in a changing world
- 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
- expand their understanding of what it means to be educated Canadian and global citizens

### EN: AP ENGLISH LITERATURE and COMPOSITION 12

Prerequisite: Literary Studies 11 and Teacher Recommendation

Exam Fee: \$150.00

This is a 7-credit course. Students electing this course will be involved in an enriched study of literature and the history of the English Language. The ability to write independent literary criticism and to appreciate literature from a variety of genres and eras are the main goals of the course. Students are required to write the Advanced Placement Examination in May. Students obtaining a sufficiently high standing will be eligible for first year English credit at many universities across North America.

The major objectives of this course are to:

1. Study individual authors in relation to the times in which they lived.
2. Extend the student's knowledge of the writers and periods that appeal to them.
3. Give students an idea of our cultural heritage so that they can better understand themselves and their society.
4. Help students to see the historical roots of contemporary literature.

### EN: PSYCHOLOGY 12

Prerequisite: Literary Studies 11 or permission of the teacher

This course introduces students to the systematic and scientific study of behaviour and mental processes, in this academic elective. Students learn about the principles and phenomena of the major sub-fields within Psychology and about the diverse range of treatment options that psychologists use in their practice. This course is discussion-based and experiential – given the nature of the topics covered a mature attitude is essential.

Units of study may include:

1. Social Psychology
2. Nature, Nurture and Human Diversity
3. Neuroscience and Behaviour
4. Sensation and Perception
5. Learning and Memory
6. Psychological Disorders and Therapy
7. Personality and Emotion
8. Motivation and Stress





### ELL: ELL 1/2 LITERATURE JUNIOR

Grades 8-9

This course is designed to give students practice and instruction in reading a variety of texts at appropriate levels. The focus will be on increasing reading comprehension and speed as well as developing reading skills such as making connections and predictions.

### ELL: ELL 1/2 SCIENCE JUNIOR

Grades 8-9

This course is designed to give students some basic science knowledge and terminology. The mechanics of writing, spelling, sentence structure, grammar, and punctuation are emphasized through science content. Class time is also used to support students with their regular science classes.

### ELL: ELL 1/2 SOCIAL STUDIES JUNIOR

Grades 8-9

This course is designed to give students opportunities to practice reading, writing, listening, and speaking skills in English while learning about their community, culture, Canadian geography, world geography, and Canada: the provinces, capitals, regions, resources, and industries. Language for communication is the focus of this course as well as some academic language.

### ELL: ELL 1/2 LITERATURE SENIOR

Grades 10-12

This course is designed to give students practice and instruction in reading a variety of texts at appropriate levels. The focus will be on increasing reading comprehension and speed as well as developing reading skills such as making connections and predictions.

### ELL: ELL 1/2 SCIENCE SENIOR

Grades 10-12

This course is designed to give students some basic science knowledge and terminology. The mechanics of writing, sentence structure, grammar, and punctuation are emphasized through science content. Class time is also used to support students with their regular science classes.

### ELL: ELL 1/2 SOCIAL STUDIES SENIOR

Grades 10-12

This course is designed to give students opportunities to practice reading, writing, listening, and speaking skills in English while learning about their community, culture, Canadian geography, world geography, and Canada: the provinces, capitals, regions, resources, and industries. Language for communication is the focus of this course as well as some academic language.



### ELL: ELL 3 COMPOSITION JUNIOR

Grades 8-9

This course focuses on the teaching of technical and mechanical skills in writing. Students will concentrate on acquiring a functional vocabulary, reinforcing and refining grammar skills, and applying language structure and usage in exploring many types of writing. Emphasis will be placed on communication through writing and developing and applying writing styles through practice. Students will spend much time reading, planning, writing, and revising.

In order to support the social studies curriculum and to further students' knowledge of Canada, discussions and readings will include topics that deal with Canadian current events, history, and geography.

### ELL: ELL 3 LITERATURE JUNIOR

Grades 8-9

This course is designed to provide a bridge between ELL and the mainstream English class. This class focuses on both literature and language and gives students an opportunity to develop and practice reading strategies, discuss and respond to a variety of texts, and practice both creative and expository writing.

### ELL: ELL 3 COMPOSITION SENIOR

Grades 10-12

This course focuses on the teaching of technical and mechanical skills in writing. Students will concentrate on acquiring a functional vocabulary, reinforcing and refining grammar skills, and applying language structure and usage in exploring many types of writing. Emphasis will be placed on communication through writing and developing and applying writing styles through practice. Students will spend much time reading, planning, writing, and revising.

In order to support the social studies curriculum and to further students' knowledge of Canada, discussions and readings will include topics that deal with Canadian current events, history, and geography.

### ELL: ELL 3 LITERATURE SENIOR

Grades 10-12

This course is designed to provide a bridge between ELL and the mainstream English class. This class focuses on both literature and language and gives students an opportunity to develop and practice reading strategies, discuss and respond to a variety of texts, and practice both creative and expository writing.

### ELL: ELL 4 COMPOSITION JUNIOR

Grades 8-9

This course focuses on helping students further develop vocabulary and language skills that are necessary in the study of academic concepts in English. Emphasis is placed on developing and applying effective writing styles through extensive practice. A portion of classroom time may be dedicated to providing support to students in academic courses.

### ELL: ELL 4 COMPOSITION SENIOR

Grades 10-12

This course focuses on helping students further develop vocabulary and language skills that are necessary in the study of academic concepts in English. Emphasis is placed on developing and applying effective writing styles through extensive practice. A portion of classroom time may be dedicated to providing support to students in academic courses.



## HE: HOME ECONOMICS 8

This course is a part of the Applied Design, Skills, and Technology 8 rotation. The half-year module of Home-Ec 8 will include Food Studies and Textiles. Within Food Studies, students will learn how to prepare food safely, develop their basic food preparation skills, and learn how to select and use tools and equipment for the various cooking principles used. In Textiles, students will learn how to sew by hand and by machine; students will work on about 2 to 3 projects in Textiles.

## HE: FOOD STUDIES 9

Prerequisite: None

Did you enjoy the Food Studies portion of Home Economics 8? If so, then come to Food Studies 9 for an entire year of Foods! In this course students will continue to develop their basic food preparation skills as well as be introduced to more advanced baking and cooking techniques. Examples of labs have included lasagna, butter chicken, sushi, pad thai, various rice, pasta, meat, vegetarian, and soup dishes for meals, gingerbread houses, cheesecakes, decorated cakes...and much more! Students will have the opportunity to select a few of their own recipes to test out too.

## HE: TEXTILES 9

Prerequisite: None

This course is designed for students who have just completed Home Economics 8. It covers the use of a sewing machine, the basic principles of clothing construction and simple pattern alterations, as well as the introduction to the serger. Students will sew several garments using easy to handle woven fabrics: pajamas, an unlined skirt or pants, a blouse, and a garment of their own choice.

## HE: FOOD STUDIES 10

Recommended Prerequisite: Food Studies 9

Do you want to be able to cook for yourself and others? Do you want to continue your exploration of the world of Foods? Do you like being creative with Food? If you answered 'yes' to any of the above, then come join us and let's continue this culinary adventure together! Students with or without cooking experience are welcome to sign up for this course. This course is taught as a split class with Food Studies 9. The program rotates so students will experience a new course every year. Student interests and input also guide the design of this course and what we make in class. Students will have the opportunity to select a few of their own recipes to test out too.

## HE: FOOD STUDIES 11

Fee: B.C. Ministry "Foodsafe" certification course offered \$23.00 (optional) - for book and certificate.

This course is taught as a split class with Food Studies 11. The program rotates so students will experience a new course should they decide to take Food Studies 11 and 12.

Looking for all food enthusiasts! In this course students will explore the use of specialized tools and equipment, use a variety of cooking and baking methods, look into individual eating practices, global food issues, and at food from around the world. This course is ideal for those who wish to develop a creative use of their skills during their leisure time, or for those who wish to work in the food service industry. Students will be given the opportunity to plan meals and select their own recipes. Examples of labs have included appetizers, soups, pastries, desserts, wedding cakes, meals both vegetarian and meat, and an iron chef competition. If you have a passion and interest for Foods, then come cook with us!

## HE: FOOD STUDIES 12

This course is taught as a split class with Food Studies 11. The program rotates so students will experience a new course should they decide to take Food Studies 11 and 12.

Looking for all food enthusiasts! In this course students will explore the use of specialized tools and equipment, use a variety of cooking and baking methods, look into individual eating practices, global food issues, and at food from around the world. This course is ideal for those who wish to develop a creative use of their skills during their leisure time, or for those who wish to work in the food service industry. Students will be given the opportunity to plan meals and select their own recipes. Examples of labs have included appetizers, soups, pastries, desserts, wedding cakes, meals both vegetarian and meat, and an iron chef competition. If you have a passion and interest for Foods, then come cook with us!



### HE: TEXTILES 10

Prerequisite: None

This course is designed for students with little or no sewing background and is available to students in grades 10 through 12. It will satisfy the Applied Skills requirement of the Graduation Program. Textiles 10 covers the use of a sewing machine, the basic principles of clothing construction and simple pattern alterations as well as the introduction to the serger. The students will sew several garments using easy to handle woven fabrics: pajamas, an unlined skirt or pants, a blouse, and a garment of their own choice.

### HE: TEXTILES 11

Textiles 11 is for students who want to develop their individual expression in clothing selection, and covers advanced principles of pattern alterations and clothing construction. The students work toward a coordinated wardrobe by constructing garments and accessories of a complex and challenging level. They will gain more confidence in using the serger as well as the conventional sewing machine. Some of the projects for this year will include: a lined skirt or pants, an unlined jacket, and a garment of their own choice. Basic supplies will be provided to students in order to meet the learning outcomes of all courses. Textiles 11 counts as an Applied Skills course for graduation credit.

### HE: TEXTILES 12

Textiles 12 is designed for those students who would like to gain further knowledge and skills relating to clothing and textiles. The students are expected to use advanced techniques and technologies to produce textile items. This is a project-oriented course enables the students to create garments of their choice based on prescribed learning outcomes. Some of the projects for this year will include: a tailored jacket, evening wear, and a garment of their choice.

### HE: FAMILIES & SOCIETY 10

This course is designed to provide students with the knowledge, skills and attitudes that will assist them in understanding what is Family. This course will cover societal influences and impacts on families and family dynamics, interpersonal relationships in families and roles and responsibilities of family members.

This course integrates several methods of learning such as interactive presentations, guest speakers, community service, etc.

### HE: INTERPERSONAL & FAMILY RELATIONSHIPS 11

This course is designed to provide students with the knowledge, skills and attitudes that will assist them in making informed decisions related to family and interpersonal relationship. The topics covered in this course include: communication styles and strategies, indicators of readiness for a committed relationship, marriage and commitment customs and how they are influenced by culture.

This course integrates several methods of learning such as interactive presentations, guest speakers, community service, etc.

### HE: CHILD DEVELOPMENT & CAREGIVING 12

This course is designed to provide students with the knowledge, skills, and attitudes that will assist them in making informed decisions related to parenting. Topics covered in this course include pregnancy and childbirth, child development and parenting.

This course integrates several methods of learning such as interactive presentations, guest speakers, community service, etc.



### MA: MATHEMATICS 8

The purpose and big ideas of this course is to enable students to understand that:

- Numbers can be represented in many forms and reflect different relationships.
- Numeracy helps us to see patterns, communicate ideas, and solve problems.
- Patterns allow us to see relationships and develop generalizations.
- Geometry and measurement empower us to make meaning of the world.
- We can apply mathematics to inquiry questions and use it to communicate information and data.
- Data enable us to draw conclusions and make predictions in an unstable world.

Throughout the course, students will be given opportunities to develop reasoning, analyzing, understanding, solving, communicating, representing, connecting and reflecting skills while learning the content in the following areas: integers, operations with fractions, rates & ratios, financial literacy, square roots & Pythagorean Theorem, linear equations & functions, surface area & volume.

### MA: MATHEMATICS 9

The purpose and big ideas of this course is to enable students to understand that:

- Numbers can be represented in many forms and reflect different relationships.
- Numeracy helps us to see patterns, communicate ideas and solve problems.
- Patterns allow us to see relationships and develop generalizations.
- Geometry and measurement empower us to make meaning on the world.
- We can apply mathematics to inquiry questions and use it to communicate information and data.
- Data enable us to draw conclusions and make predictions in an unstable world.

Throughout the course, students will be given opportunities to develop reasoning, analyzing, understanding, solving, communicating, representing, connecting and reflecting skills while learning the content in the following areas: square roots, powers, polynomials & exponent laws, linear equations, finance reasoning, rational numbers, probability & statistics, linear relations, similarity & scale factors.

### MA: MATH 9 ADAPTED

#### Prerequisite:

1. **Mathematics 8**
2. **Consent of teacher, counselor, and parents/guardians**

This course is designed for students who are seeking to focus on building stronger foundational understanding and skills. The pace of the course will be slower compared to the Mathematics 9 course because it has been designed to support students in developing fundamental skills.

The purpose and big ideas of this course is to enable students to understand that:

- Numbers can be represented in many forms and reflect different relationships.
- Numeracy helps us to see patterns, communicate ideas, and solve problems.
- Patterns allow us to see relationships and develop generalizations.
- Geometry and measurement empower us to make meaning on the world.
- We can apply mathematics to inquiry questions and use it to communicate information and data.
- Data enable us to draw conclusions and make predictions in an unstable world.

Throughout the course, students will be given opportunities to develop reasoning, analyzing, understanding, solving, communicating, representing, connecting, and reflecting skills while learning the content in the following areas: square roots, powers, polynomials & exponent laws, linear equations, finance reasoning, rational numbers, probability & statistics, linear relations, and similarity & scale factors.





### MA: FOUNDATIONS OF MATHEMATICS & PRE-CALCULUS 10

Prerequisite: C or higher in Math 9 is strongly recommended.

The purpose and big ideas of this course is to enable students so they can:

- use algebra to generalize relationships through abstract thinking to represent and analyze situations that allows us to notice and wonder about relationships.
- understand the meanings of, and connections between, each operation extend to powers and polynomials.
- understand that constant rate of change is an essential attribute of linear relations and has meaning in different representations and contexts.
- understand that trigonometry involves using proportional reasoning to solve indirect measurement problems.

This course (continued into grades 11 and 12) is designed to provide students with a mathematical knowledge required for post-secondary studies. Students will solve problems involving measurement, surface area, volume, and trigonometry. In algebra, we study prime factors, square and cube roots, irrational numbers, and we further our knowledge of powers to include negative and fractional exponents. Polynomials are multiplied and factored. In Geometry, we study functions, coordinates, and straight lines.

### MA: WORKPLACE MATH 10

Prerequisite: Mathematics 9 or Workplace Math 9

This course (continued into grade 11) is designed to provide students with the mathematical knowledge identified for entry into the majority of trades and for direct entry into the workforce. Topics include measurements in both metric and imperial systems, areas and volumes, Pythagoras' Theorem, similar shapes, angle rules, and trigonometry. The arithmetical operations are reinforced with work on proportions and currency exchange and pay slips. Formulas are used to apply knowledge in familiar situations. Placement in this course can only take place after consultation with the teacher, student, parent and counsellor.

### MA: PRE-CALCULUS 11

Prerequisite: C+ or higher in Foundations of Mathematics and Pre-Calculus 10 is strongly recommended.

This course is designed to prepare students with mathematical knowledge required for post-secondary studies in areas that require Calculus (i.e. Science, Engineering and Commerce). This course will focus on topics that require abstract thinking. Topics include arithmetic and geometric sequences, polynomials, solving and graphing absolute values, radical expressions, quadratic functions involving system of equations and inequalities, reciprocal functions, and trigonometry involving angles in standard position.

### MA: FOUNDATIONS OF MATH 11

Prerequisite: Foundations of Mathematics and Pre-Calculus 10

This course is designed to provide students with a mathematical knowledge required for direct entry into post-secondary studies in the areas of Humanities. Topics include application of rates, scale factors through proportional reasoning with application to measurement of 2D and 3D objects, trigonometry with sine and cosine laws, inductive and deductive reasoning to solve problems, interpretation of statistical data and quadratic functions.

### MA: WORKPLACE MATH 11

Prerequisite: Workplace Mathematics 10 or Foundations of Mathematics and Pre-Calculus 10

This course is a continuation of Workplace Math 10 and is designed to provide students with the mathematical knowledge identified for entry into the majority of trades and for direct entry into the workforce. Topics include measurements in both metric and imperial systems, areas and volumes in 2D & 3D, trigonometry involving multiple triangles, problem solving, personal budgets, simple & compound interest with investments and loans, banking services and data analysis. The concepts will be reinforced through problems that reflect how math is used in our daily lives. Consent from parent, teacher and counselor is required.



### MA: FOUNDATIONS OF MATH 12

Prerequisite: Foundations of Math 11 or Pre-Calculus 11

This course is designed for students who require knowledge on the application of mathematical concepts, but not theoretical calculus. The curriculum includes: financial decisions, budgeting, problem solving through logic, probability, permutations, exponential functions, and sinusoidal functions. Personal financial management is a focus in this course for students to develop good judgment in terms of complex investments and loans (i.e. credit and mortgages). Foundations of Math 12 can be used for post secondary admissions.

### MA: PRE-CALCULUS 12

Prerequisite:

1) C+ or higher in Pre-Calculus 11 is recommended.

This course is designed to prepare students with mathematical knowledge required for post-secondary studies in areas that require Calculus (i.e. Science, Engineering, and Commerce). This course will focus on topics that require abstract thinking. Topics include: transformation of functions, exponential functions, logarithmic functions, trigonometric functions, and permutations.

### MA: AP CALCULUS 12

Prerequisite:

- 1) Pre-Calculus 11 or Pre-Calculus 12. Pre-Calculus 12 must be taken concurrently if not already completed.
- 2) Recommendation of teacher.
- 3) Achieving a suitable mark on placement test.

Recommendation: 75% or better in Pre-Calculus 11

This course is designed for academically motivated and positive students who are intending to study calculus at the university or college level. Some of the topics covered include: limits, differentiation, applications of the derivative, curve sketching, integration and area. This course will cover material equivalent to a student's first semester of university calculus (e.g. UBC Math 100). Applications and word problems will be emphasized throughout the course.



### ML: FRENCH 8

French 8 focuses on basic French language skills to help students become more comfortable using the language in fun and practical ways. Emphasis is on building their communication and comprehension skills through speaking, listening, writing and reading. Students will learn to ask and answer a variety of questions about familiar topics, describe people and personal interests, explain reasons for physical/emotional states, express basic beliefs and opinions, and recognize the relationship between French letter patterns and pronunciation. Students will practice these skills through daily speaking and writing activities, songs, games, skits, videos/movies, Communi-Quête 1 (textbook), the Cahier Interactif and Duolingo. Each unit will conclude with a project in which students demonstrate their learning in creative and practical ways.

### ML: FRENCH 9

Prerequisite: French 8

French 9 continues to build on the language skills from Grade 8 to help students become more comfortable using the language in fun and practical ways. Emphasis is on continuing to build their communication and comprehension skills through speaking, listening, writing and reading. Students will learn to use past, present and future time frames to engage in conversation about familiar topics, ask various types of questions, describe items, people, places and personal interests, compare and contrast, sequence events, express needs and opinions, and apply appropriate pronunciation and intonation in their speech. Students will practice these skills through daily speaking and writing activities, songs, games, skits, videos/movies, Communi-Quête 2 (textbook), the Cahier Interactif, Duolingo and a novel study. Students will also engage with the Francophone community through a Penpal project. Each unit will conclude with a project in which students demonstrate their learning in creative and practical ways.

### ML: FRENCH 10

Prerequisite: French 9

French 10 continues to build on the language skills from Grade 9 to help students become comfortable using the language in practical ways. Emphasis is on increasing fluency through speaking, listening, writing and reading. Students will continue to use past, present and future time frames to engage in conversation about familiar topics, narrate stories (both orally and in writing), ask various types of questions, sequence events, express degrees of likes and dislikes, describe their hopes and dreams, express their opinions about familiar topics, use idiomatic expressions, and express themselves with increasingly fluent speech and accurate pronunciation. Students will practice these skills through daily speaking and writing activities, songs, games, skits, videos/movies, Communi-Quête 3 (textbook), Duolingo and a novel study. Students will also engage with the Francophone community through a Penpal project. Each unit will conclude with a project in which students demonstrate their learning in creative ways.

### ML: FRENCH 11

Prerequisite: French 10

French 11/12 (taught as a combined course) emphasizes more fluent and accurate communication and comprehension through speaking, listening, writing and reading. Students will use a wide variety of past, present, future and conditional tenses to engage in meaningful conversations on a variety of topics of interest, narrate stories (both orally and in writing), respond personally to texts, ask various types of questions, sequence events, make predictions, state and compare opinions, use idiomatic expressions, and explore personal, educational and professional opportunities requiring proficiency in French. Students will practice these skills through daily speaking and writing activities, poetry, music, videos/movies, games, skits, Duolingo and two novel studies. Students will also engage with the Francophone community through Penpal letters and a collaborative project with EFI students from Mitchell. Each unit will conclude with a project in which students demonstrate their learning in creative ways.

### ML: FRENCH 12

Prerequisite: French 11

French 11/12 (taught as a combined course) emphasizes more fluent and accurate communication and comprehension through speaking, listening, writing and reading. Students will use a wide variety of past, present, future and conditional tenses to engage in meaningful conversations on a variety of topics of interest, narrate stories (both orally and in writing), respond personally to texts, ask various types of questions, sequence events, make predictions, state and compare opinions, use idiomatic expressions, and explore personal, educational and professional opportunities requiring proficiency in French. Students will practice these skills through daily speaking and writing activities, poetry, music, videos/movies, games, skits, Duolingo and two novel studies. Students will also engage with the Francophone community through Penpal letters and a collaborative project with EFI students from Mitchell. Each unit will conclude with a project in which students demonstrate their learning in creative ways.



## ML: MANDARIN 9

Prerequisite: None

This is a beginners course in Mandarin Chinese. Students will be introduced to the Pinyin Romanization system for pronunciation, the spoken form for simple responses, the basic structure of written Chinese, and a core vocabulary of Chinese characters drawn from the text. Listening and speaking are the skills most emphasized. The cultural component of this course will enable students to develop an understanding of and an appreciation for the Chinese culture.

## ML: MANDARIN 10

Prerequisite: Mandarin 9

This is a second level course in Mandarin Chinese. Students will be expected to consolidate their knowledge of pinyin, character writing, and the basic structure of oral and written Chinese. They are also expected to write sentences and short paragraphs. The cultural component of this course will help students to develop skills in comparing and contrasting aspects of Chinese culture with those of the students' own cultures.

## ML: MANDARIN 11

Prerequisite: Mandarin 10 OR Beg Mandarin 11

In this course, students will be exposed to the more complex dialogues of daily situations, and will learn some grammatical patterns of oral and written Mandarin Chinese. They are also expected to write notes, letters, and diaries. At this level, student knowledge of pinyin should be consolidated, along with mastery of Mandarin sounds and tones.

## ML: MANDARIN 12

Prerequisite: Mandarin 11

In this course, students will continue to increase their ability to communicate effectively in Mandarin Chinese. In addition to situational dialogues, students will be exposed to some classical and contemporary Chinese literary pieces such as: proverbs, poems, plays, and short stories. They will also be expected to write complex sentences and well-developed paragraphs.

## ML: SPANISH 9

Prerequisite: None

This is an introductory course with an emphasis on speaking and listening using the "Realidades" program. Students will not only learn how to communicate in Spanish in basic situations, but also about the cultures of many Spanish-speaking countries. The program has additional online resources that help students practice the Spanish they learn in class in a fun way. After completing this course, students will be able to carry on simple conversations such as exchanging personal information, discussing interests and ordering food in restaurants.

## ML: SPANISH 10

Prerequisite: Spanish 9

This course continues to build upon Spanish 9 using the "Realidades" program. Listening and speaking will be emphasized, but there will be a greater focus on writing proficiency and grammatical accuracy. Students will learn more about the cultures of various Spanish countries through music, movies, readings, and discussions. By the end of Spanish 10, students will be competent speaking about past and future events, giving their opinions, and confident in various situations such as shopping for clothing.



### ML: SPANISH 11

Prerequisite: Spanish 10

Students will continue to build upon their knowledge of Spanish and use it in increasingly complex situations. Students will improve their oral communication through conversations, interviews, songs, and role-playing. Written fluency will also be developed. Upon completion, students will be able to communicate in a variety of situations they might encounter in a Spanish-speaking country.

### ML: SPANISH 12

Prerequisite: Spanish 11

This course uses the "Realidades" program to develop students' fluency and accuracy in Spanish. Classes will require active participation in a communicative environment with regular opportunities to practice all language skills (reading, writing, listening, speaking). Students will also gain a deeper understanding of social issues and movements that have had an impact in the Hispanic world. After completing Spanish 12, students should feel comfortable travelling to Spanish-speaking countries and communicating.



### MU: INSTRUMENTAL MUSIC 8 - BAND

Prerequisite: One year of music recommended, not required

Anyone interested in playing a band instrument is welcome to take this course. While previous band experience is recommended (i.e. playing in at least one year of elementary band), it is not required. The band plays a wide range of genres, from traditional band pieces, to jazz, pop, and movie themes. Students will develop healthful playing technique, tone, music theory, and ear training. This group performs at the school and in the community throughout the year. Come make music with us!

### MU: INSTRUMENTAL MUSIC 8 - GUITAR

Prerequisite: None

This course is for students who have little or no experience on guitar. Students will develop skills such as finger picking, strumming, and chord forms. Students will also develop an understanding of music theory through playing rhythm, melodies, and chords. Students will be encouraged to improvise, compose, and perform solos or in small groups. Come learn to make and share your music with us!

### MU: CHORAL MUSIC 8

Prerequisite: None

Anyone interested in choral singing is welcome to take this course. No musical experience is required. Students will learn to develop their vocal technique through vocal health practices, voice projection, music theory, and ear training. If you can sing in the shower, you can sing in this choir. Sing on with us!

### MU: INSTRUMENTAL MUSIC 9 - BAND

Prerequisite: One year of music recommended, not required

Anyone interested in playing a band instrument is welcome to take this course. While previous band experience is recommended (i.e. playing in at least one year of elementary band), it is not required. The band plays a wide range of genres, from traditional band pieces, to jazz, pop, and movie themes. Students will develop healthful playing technique, tone, music theory, and ear training. This group performs at the school and in the community throughout the year. Come make music with us!

### MU: INSTRUMENTAL MUSIC 9 - GUITAR

Prerequisite: None

This course is for students who have little or no experience on guitar. Students will develop skills such as finger picking, strumming, and chord forms. Students will also develop an understanding of music theory through playing rhythm, melodies, and chords. Students will be encouraged to improvise, compose, and perform solos or in small groups. Come learn to make and share your music with us!

### MU: CHORAL MUSIC 9

Prerequisite: None

Anyone interested in choral singing is welcome to take this course. No musical experience is required. Students will learn to develop their vocal technique through vocal health practices, voice projection, music theory, and ear training. If you can sing in the shower, you can sing in this choir. Sing on with us!

### MU: INSTRUMENTAL MUSIC 10 - BAND

Prerequisite: One year of music recommended, not required

Anyone interested in playing a band instrument is welcome to take this course. While previous band experience is recommended (i.e. playing in at least one year of elementary band), it is not required. The band plays a wide range of genres, from traditional band pieces, to jazz, pop, and movie themes. Students will develop healthful playing technique, tone, music theory, and ear training. This group performs at the school and in the community throughout the year. Come make music with us!





### MU: INSTRUMENTAL MUSIC 10 - GUITAR

Prerequisite: None

This course is for students who have little or no experience on guitar. Students will develop skills such as finger picking, strumming, and chord forms. Students will also develop an understanding of music theory through playing rhythm, melodies, and chords. Students will be encouraged to improvise, compose, and perform solos or in small groups. Come learn to make and share your music with us!

### MU: CHORAL MUSIC 10

Prerequisite: None

Anyone interested in choral singing is welcome to take this course. No musical experience is required. Students will learn to develop their vocal technique through vocal health practices, voice projection, music theory, and ear training. If you can sing in the shower, you can sing in this choir. Sing on with us!

### MU: INSTRUMENTAL MUSIC 11 - CONCERT BAND

Prerequisite: One year of music recommended, not required

Anyone interested in playing a band instrument is welcome to take this course. While previous band experience is recommended (i.e. playing in at least one year of elementary band), it is not required. The band plays a wide range of genres, from traditional band pieces, to jazz, pop, and movie themes. Students will develop healthful playing technique, tone, music theory, and ear training. This group performs at the school and in the community throughout the year. Come make music with us!

### MU: INSTRUMENTAL MUSIC 11 - GUITAR

Prerequisite: None

This course is for students who have little or no experience on guitar. Students will develop skills such as finger picking, strumming, and chord forms. Students will also develop an understanding of music theory through playing rhythm, melodies, and chords. Students will be encouraged to improvise, compose, and perform solos or in small groups. Come learn to make and share your music with us!

### MU: CHORAL MUSIC 11

Prerequisite: None

Anyone interested in choral singing is welcome to take this course. No musical experience is required. Students will learn to develop their vocal technique through vocal health practices, voice projection, music theory, and ear training. If you can sing in the shower, you can sing in this choir. Sing on with us!

### MU: INSTRUMENTAL MUSIC 12 - CONCERT BAND

Prerequisite: One year of music recommended, not required

Anyone interested in playing a band instrument is welcome to take this course. While previous band experience is recommended (i.e. playing in at least one year of elementary band), it is not required. The band plays a wide range of genres, from traditional band pieces, to jazz, pop, and movie themes. Students will develop healthful playing technique, tone, music theory, and ear training. This group performs at the school and in the community throughout the year. Come make music with us!

### MU: INSTRUMENTAL MUSIC 12 - GUITAR

Prerequisite: None

This course is for students who have little or no experience on guitar. Students will develop skills such as finger picking, strumming, and chord forms. Students will also develop an understanding of music theory through playing rhythm, melodies, and chords. Students will be encouraged to improvise, compose, and perform solos or in small groups. Come learn to make and share your music with us!

### MU: CHORAL MUSIC 12

Prerequisite: None

Anyone interested in choral singing is welcome to take this course. No musical experience is required. Students will learn to develop their vocal technique through vocal health practices, voice projection, music theory, and ear training. If you can sing in the shower, you can sing in this choir. Sing on with us!



### PE: PHYSICAL & HEALTH EDUCATION 8

The goal of this course is to develop the knowledge, understanding, and skills necessary to maintain a healthy lifestyle by remaining physically active throughout life. By providing opportunities for students to participate in a variety of movement categories, it is hoped that students will discover activities that they will enjoy into adulthood. Students will learn skills, rules, strategies, and etiquette for various games as well as appropriate social behaviors for working in team situations. In addition, students will learn about making healthy choices, building healthy relationships and advocating for the health and well-being of others.

### PE: PHYSICAL & HEALTH EDUCATION 8 PATHWAYS

Students will follow the same core curriculum as PHE 8. However, students will have enriched opportunities such as field trips and special projects to further explore curricular areas of interest.

### PE: PHYSICAL & HEALTH EDUCATION 9

The goal of this course is to develop the knowledge, understanding, and skills necessary to maintain a healthy lifestyle by remaining physically active throughout life. By providing opportunities for students to participate in a variety of movement categories, it is hoped that students will discover activities that they will enjoy into adulthood. Students will learn skills, rules, strategies, and etiquette for various games as well as appropriate social behaviors for working in team situations. In addition, students will learn about making healthy choices, building healthy relationships and advocating for the health and well-being of others.

### PE: PHYSICAL & HEALTH EDUCATION 9 PATHWAYS

Students will follow the same core curriculum as PHE 9. However, students will have enriched opportunities such as field trips and special projects to further explore curricular areas of interest.

### PE: PHYSICAL & HEALTH EDUCATION 10

The goal of this course is to develop the knowledge, understanding, and skills necessary to maintain a healthy lifestyle by remaining physically active throughout life. By providing opportunities for students to participate in a variety of movement categories, it is hoped that students will discover activities they will enjoy into adulthood. Students will learn skills, rules, strategies, and etiquette for various games as well as appropriate social behaviours for working in team situations. Students will learn how to set personal healthy living goals and plan how to achieve them while reflecting on their progress. In addition, students will learn about basic principles for responding to emergencies (First Aid), making healthy choices, building healthy relationships and advocating for the health and well being of others.

### PE: PHYSICAL & HEALTH EDUCATION 10 PATHWAYS

Students will follow the same core curriculum as PHE 10. However, students will have enriched opportunities such as field trips and special projects to further explore curricular areas of interest.

### PE: PHE 11 ACTIVE LIVING

Prerequisite: PHE 10

PHE 11 – Active Living emphasizes the preparation for an active and healthy lifestyle after students leave school. The program features a variety of individual/dual activities, team sports, recreational, and leisure activities. Students will learn ways to monitor their personal exertion levels in sport and activities, understand the benefits of participation in activity for their personal health and mental well being and examine the short and long term consequences of health decisions. The class selects and plans units and field trips. Field trips are optional activities that enhance and extend the learning outcomes of the course. Students choosing to participate in the field trip experiences will be required to pay for these activities.



### PE: PHE 12 ACTIVE LIVING

Prerequisite: PHE 11 ACTIVE LIVING

PHE 12 – Active Living is an extension of the PHE 11 Active Living program. It will include: individual/dual activities, team games, recreational, and leisure activities. Students will also examine the potential consequences of making healthy decisions, creating healthy relationships and making healthy eating choices which they can successfully achieve once they leave high school. Field trips are optional activities that enhance and extend the learning outcomes of the course. Students choosing to participate in the field trip experiences will be required to pay for these activities.

### PE: FEM FIT 11

Prerequisite: PHE 10 and/or PHE 11 ACTIVE LIVING

The focus of this course is on fun and fitness; this is a course designed by females for females. This course is made up of various activities involving team and individual games, fitness, circuit training, bootcamp, core training, dance, spinning, cardio kickbox, pilates, self-defense, etc. The use of our community recreation facilities and outside fieldtrips enhances and extends the learning outcomes of the course. Students are required to pay a course fee to cover the cost of field experiences and guest instructors.

### PE: FEM FIT 12

Prerequisite: PHE 10 and/or PHE 11 ACTIVE LIVING

The focus of this course is on fun and fitness; this is a course designed by females for females. This course is made up of various activities involving team and individual games, fitness, circuit training, bootcamp, core training, dance, spinning, cardio kickbox, pilates, self-defense, etc. The use of our community recreation facilities and outside fieldtrips enhances and extends the learning outcomes of the course. Students are required to pay a course fee to cover the cost of field experiences and guest instructors.

### PE: FITNESS & CONDITIONING 11

Prerequisite: PHE 10 and/or PHE 11 ACTIVE LIVING

This course will provide opportunities for students to gain the knowledge and skills to become their own personal trainer. Such skills will include:

- Understanding and explaining the components of fitness
- Assessing personal fitness
- Learning and using different training techniques
- Assessing and regulating heart rate during exercise
- Associating specific muscles with fitness exercises
- Creating and implementing a personalized fitness program

Students will experience a variety of fitness options that they may continue to use after high school to remain fit and healthy. The focus of this course is on individual fitness – Students should show a passion and willingness to work hard in this course. Field trips are optional activities that enhance and extend the learning outcomes of the course. Students choosing to participate in field trip experiences will be required to pay for these activities.

### PE: FITNESS & CONDITIONING 12

Prerequisite: PHE 10 and/or PHE 11 ACTIVE LIVING

This course will provide opportunities for students to gain the knowledge and skills to become their own personal trainer. Such skills will include:

- Understanding and explaining the components of fitness
- Assessing personal fitness
- Learning and using different training techniques
- Assessing and regulating heart rate during exercise
- Associating specific muscles with fitness exercises
- Creating and implementing a personalized fitness program

Students will experience a variety of fitness options that they may continue to use after high school to remain fit and healthy. The focus of this course is on individual fitness – Students should show a passion and willingness to work hard in this course. Field trips are optional activities that enhance and extend the learning outcomes of the course. Students choosing to participate in field trip experiences will be required to pay for these activities.



### PE: REC LEADERSHIP 11

Prerequisite: PHE 10 and a course application

Recreation Leadership 11 is a course designed to provide highly motivated students with an opportunity to enhance their leadership and organizational skills while working within the Athletics Program at Cambie. Students will explore leadership skills and strategies in a collaborative setting and they will be given practical opportunities to develop, apply, and enhance these skills. Students will also gain officiating sessions that will prepare them to assume roles as sport coaches and sport officials for our school teams. Students will be expected to act as tournament coordinators, intramurals coordinators, sport officials, and team managers. This will require students to have a high degree of self-motivation, as a great deal of the course work will be in self-directed activities. Volunteer hours in the school will be required. Field experiences will be organized for students enrolled in this course as a reward for their efforts throughout the school year. Students must apply for this Recreation Leadership course prior to being accepted. Leadership camp, field trips, and "Rec Olympics" are just a few of the fun events that Recreation Leadership students will experience throughout the year. Students also have the opportunity to earn Work Experience credit associated with this course. If you are looking for a course that will transform your high school experience, then talk to your counsellors and Mr. Meier and complete the [online application form](#).

### PE: REC LEADERSHIP 12

Prerequisite: PHE 10 and a course application

Recreation Leadership 12 is a course designed to provide highly motivated students with an opportunity to enhance their leadership and organizational skills. This course follows a natural progression from the Rec Leadership 11 course, but does not require this as a prerequisite. Students in this program will have the opportunity to develop, plan, and implement programs and activities for Cambie students. Students in Rec 12 will also learn to see beyond themselves and experience the true meaning of giving as they coordinate programs for less fortunate individuals - such as the Wake-a-thon and the Relay for Life. Students will leave this course equipped with many of the skills and tools that are essential to success in their future endeavours. Leadership camp, field trips, and "Rec Olympics" are just a few of the fun events that Recreation Leadership students will experience throughout the year. Students also have the opportunity to earn Work Experience credit associated with this course. If you are looking for a course that will transform your high school experience, then talk to your counsellors and Mr. Meier and complete the [online application form](#).

### PE: WORK EXPERIENCE REC LEADERSHIP

Please see the Work Experience section of the Cambie Program Planning book.



### LD: LEARNING STRATEGIES 8

Learning Strategies is a course designed to support students who could benefit from some extra help with their learning. Students will work with a resource teacher and a small group of peers to develop effective learning and organizational strategies. Instruction in this course is designed to target and strengthen each student's areas of need. Students are enrolled in this course on the recommendation of their Grade 7 teacher, in consultation with parents and Cambie's Resource Team.

### LD: LEARNING STRATEGIES 9

Learning Strategies is a course designed to support students who could benefit from some extra help with their learning. Students will work with a resource teacher and a small group of peers to develop effective learning and organizational strategies. Instruction in this course is designed to target and strengthen each student's areas of need. Students are enrolled in this course if they have previously taken Learning Strategies or on the recommendation of the school team.

### LD: LEARNING STRATEGIES 10

Learning Strategies is a course designed to support students who could benefit from some extra help with their learning. Students will work with a resource teacher and a small group of peers to develop effective learning and organizational strategies. Instruction in this course is designed to target and strengthen each student's areas of need. Students are enrolled in this course if they have previously taken Learning Strategies or on the recommendation of the school team. This is a 4 credit course on the graduation program.

### LD: LEARNING STRATEGIES 11

Learning Strategies is a course designed to support students who could benefit from some extra help with their learning. Students will work with a resource teacher and a small group of peers to develop effective learning and organizational strategies. Instruction in this course is designed to target and strengthen each student's areas of need. Students are enrolled in this course if they have previously taken Learning Strategies or on the recommendation of the school team. This is a 4 credit course on the graduation program.

### LD: LEARNING STRATEGIES 12

Learning Strategies is a course designed to support students who could benefit from some extra help with their learning. Students will work with a resource teacher and a small group of peers to develop effective learning and organizational strategies. Instruction in this course is designed to target and strengthen each student's areas of need. Students are enrolled in this course if they have previously taken Learning Strategies or on the recommendation of the school team.

### LD: LEARNING STRATEGIES NUMERACY

This course is for students who require individualized support and skill development in math. Students are selected by the School-Based Team in consultation with parents.

### LD: LIFE SKILLS

Life Skills is for students on the School Completion Certificate program. Candidates are selected by Cambie's School-Based Team in consultation with parents. Students usually sign up for 1 to 3 blocks of Life Skills. Literacy and Numeracy are included within the Life Skills program. Projects and field trips are part of this course.



### SC: SCIENCE 8

Science 8 is a general science course that teaches scientific literacy, lab skills and scientific inquiry methods that enables students to predict, analyse and communicate information. The big ideas explored in this course include: (Biology) the cell is the basic unit of life; (Chemistry) the behaviour of matter is explained by understanding the Kinetic Molecular Theory; (Earth Science) Earth's geographical processes are explained by the Plate Tectonic Theory; and (Physics) Energy is transferred as both a particle and a wave. Classroom learning activities that teach to the big ideas are selected to provide student opportunities to develop competencies in communication and thinking skills as well as personal and social awareness and responsibility.

### SC: SCIENCE 8 PATHWAYS

In addition to general science curriculum, Pathways students will have opportunities such as field trips, enriched lab work and projects to further explore areas of interest. At times, lessons will be condensed to create opportunities for enrichment.

### SC: SCIENCE 9

Prerequisite: Science 8

Science 9 is a general science course that teaches scientific literacy, lab skills and scientific inquiry methods that enables students to predict, analyse and communicate information. The big ideas explored in this course include: (Biology) cells come from other cells; (Chemistry) the placement of electrons around atoms impacts atoms' properties; (Physics) current electricity is the flow of electric charge and (Earth Science) the living and non-living components on the Earth's surface are interconnected as matter is cycled throughout. Classroom learning activities that teach to the big ideas are selected to provide student opportunities to develop competencies in communication and thinking skills as well as personal and social awareness and responsibility.

### SC: SCIENCE 9 PATHWAYS

Prerequisite: Science 8

In addition to general science curriculum, Pathways students will have opportunities such as field trips, enriched lab work and projects to further explore areas of interest. A major focus in this course is the Science Fair Project, a year-long inquiry-based project where students will have the option of participating in the Greater Vancouver Regional Science Fair. At times, lessons will be condensed to create opportunities for enrichment.

### SC: SCIENCE 10

Prerequisite: Science 9

Science 10 is a general science course that teaches scientific literacy, lab skills and scientific inquiry methods that enables students to predict, analyse and communicate information. The big ideas explored in this course include: (Biology) Genes are the foundation for the diversity of all living things; (Chemistry) Chemical processes require energy and change as atoms rearrange; (Physics) Energy is conserved and its transformation can affect living things and the environment; (Space Science) the formation of the universe can be explained by the Big Bang Theory. Classroom learning activities are selected to provide student opportunities to develop competencies in communication and thinking skills as well as personal and social awareness and responsibility.

### SC: SCIENCE 10 PATHWAYS

Prerequisite: Science 9

In addition to general science curriculum, Pathways students will have opportunities such as field trips, enriched lab work and projects to further explore areas of interest. At times, lessons will be condensed to create opportunities for enrichment.



### SC: SCIENCE FOR CITIZENS 11

Science for Citizens has four goals:

**GOAL 1:** Science, technology, society, and the environment (STSE) – Students will develop an understanding of the relationships between science and technology, and of the social and environmental contexts of science and technology. Areas that we study are medical technologies (such as genetic screening, MRIs, plastic surgery, nano technologies), communications (how electronic devices have changed relationships, privacy, surveillance to name a few and identity theft), agriculture (factory farms, greenhouses, hydroponics, vertical farms), water management. The end of year project has students choosing areas of study to explore such as transportation, natural resources, renewable energies, structural design and applied chemistry.

**GOAL 2:** Skills – Students will develop the skills required for scientific and technological inquiry, solving problems, communicating scientific ideas and results, working collaboratively, and making informed decisions. For example, students will use an approach that allows them to explore claims made in all areas of life including miracle cures, UFOs, paranormal phenomena (horoscopes, ghosts, palm reading, psychics) and discoveries in science.

**GOAL 3:** Knowledge – Students will construct knowledge and understandings of concepts in Life Sciences, Physical Science, and Earth and Space Science, and apply these understandings to the areas of health, agriculture, forensics, computers and communication, home and technology, and personal technologies.

**GOAL 4:** Attitudes – Students will be encouraged to develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment. Students will use a basic system of ethics (utilitarian, golden rule, and rule-based thinking) in order to support, inform and guide decisions they will make in areas where there is no one right answer.

### SC: LIFE SCIENCE 11

Life Science 11 is divided into four units, each one surveying the topic rather than going into an in-depth study of the material. There is an emphasis placed on lab work.

Unit I The realm of biology, the scientific method, evolution, recombinant DNA, genetic engineering, classification, and taxonomy

Unit II Microbiology: microscopy, viruses, and protists.

Unit III Plant Biology

Unit IV Animal biology: Invertebrates and vertebrates (including mammals).

### SC: CHEMISTRY 11

Chemistry 11 is designed to be a survey of ideas and concepts in chemistry so that students can begin to explain everyday phenomena such as why things break, why oil and water do not mix, and how light is produced by LEDs. There will be numerous opportunities to perform labs that allow students to practice their analytical skills and to become familiar with common laboratory practices (including the use of computer technology) in areas such as titrations and the synthesis of soap and esters.

Topics that are explored include the Mole concept, Atomic Theory, Periodicity, Chemical Reactions, Solution Chemistry and Organic Chemistry.

### SC: PHYSICS 11

Prerequisite: Science 10

**Myth:** Physics knowledge has little relevance to the world we live in or to most jobs.

**Fact:** Physics is fundamental to every other science and to most major technological innovations of the past century. Moreover, physics teaches critical thinking and problem skills that are useful no matter what a student goes on to do. Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. Physics challenges our imaginations with concepts like relativity and string theory, and it leads to great discoveries, like computers, cellphones and lasers, that lead to technologies which change our lives from creating the internet, to curing cancer, to developing sustainable energy solutions.

Physics 11 is designed to showcase the [power] of Physics by introducing students to a variety of topics; we will study motions, forces, energy and power, momentum, special relativity, nuclear physics and the properties of wave. Students will work through realistic, practical problems on their way to improving their scientific literacy. Students will acquire quantitative and analytic skills needed for analyzing data and solving problems in the sciences, engineering and medicine, as well as in economics, finance, management, law and public policy.



### SC: ANATOMY AND PHYSIOLOGY 12

Anatomy and Physiology 12 is an academic course that features a combination of biochemistry, cell biology, and human biology. The topics vary from DNA structure to osmosis, to kidney function. Cambie does several activities, demonstrations, and labs which help students understand the difficult concepts and help prepare our students for the experiments. For example, we build models of proteins, carbohydrates, and fats. We then use these models to better understand the molecular structure and the reactions in which they are involved. We dissect cow lungs and heart to see the connections that are difficult to see on a diagram. The analysis and discussions that follow our group activities help students understand these complex concepts.

### SC: CHEMISTRY 12

Chemistry 12 is designed to further explore the ideas and concepts in chemistry that students have encountered in Science 8-10 and Chemistry 11. As with Chemistry 11, the focus is on explaining everyday phenomena. There will be numerous opportunities for students to perform labs that allow them to practice their analytical skills and become familiar with common laboratory practices (including the use of computer technology) such as pH meter titrations, the standardization process, spectrophotometry, back titrations, and the design of simple experimental procedures (e.g. determine  $K_{sp}$ , factors that could affect batteries).

Topics that are explored include: Reaction Kinetics, Dynamic Equilibrium, Solubility Equilibrium, Acids and Bases, and Oxidation-Reduction.

### SC: PHYSICS 12

Prerequisite: Physics 11

Physics 12 is designed to be a natural extension to Physics 11; it is intended to provide insight into the scope, nature, relevance and limitations of Physics. We will revisit many topics covered in the previous course with added complexity. In addition, students will explore new topics such as circular motion, equilibrium and torque, electrostatics, circuits and electromagnetism. They will further develop their scientific investigation skills, learning, for example, how to analyze, qualitatively and quantitatively, data related to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.

Physics opens the door to many career options. Conversely, not taking physics closes the door to many career options. You can't become an engineer or a doctor without physics; your video games will be boring and your animated movies won't look realistic; and your policy judgments on global warming will be less compelling. College and corporate recruiters recognize the value of physics training. Although the number of job ads specifically asking for physicists is smaller than, e.g., for engineers, the job market for those with skills in physics is more diverse and is always strong.





### SS: SOCIAL STUDIES 8

The Social Studies 8 area of learning spans from the **7th century to 1750**. In this course, it is our hope that students learn more about themselves, each other, and the world we inhabit. The course involves **Big Ideas** about power, ideas, and change. Students completing this course will be able to recognize how the ideas and stories of various societies left a mark on cultures and landscapes, and will be able to see how these same patterns are present and active in their own world. By studying some of the many different cultures and ways of life that exist and have existed throughout the world from the 7th century to 1750, students will develop not only a deeper understanding of the differences between peoples, but also an appreciation or aspects of the human experience shared across time and space.

### SS : SOCIAL STUDIES 8 PATHWAYS

Students will follow the same core curriculum as Social Studies 8. However, students will have enriched opportunities such as field trips and special projects to further explore curricular areas of interest.

### SS: SOCIAL STUDIES 9

Prerequisite: Social Studies 8

The Social Studies 9 area of learning spans from the years **1750 - 1919**. In this course, it is our hope that students learn more about themselves, each other, and the world we inhabit. In this course, we hope that students develop critical thinking skills and come to know how Canada has been influenced by the **Big Ideas** of environment, power, ideas, and identity. This would include developing an understanding of the connections between the past, present, and future, as well as, the people, events, and trends that have shaped the development and evolution of societies, especially our own. A complete understanding of Canada's past and present includes developing an understanding of the history and culture of Canada's First Peoples.

### SS: SOCIAL STUDIES 9 PATHWAYS

Prerequisite: Social Studies 8

Students will follow the same core curriculum as Social Studies 9. However, students will have enriched opportunities such as field trips and special projects to further explore curricular areas of interest.

### SS: SOCIAL STUDIES 10

Prerequisite: Social Studies 9

The focus of Social Studies 10 is **"Canada and the World" from 1919 to the present**. It is our hope that students learn more about themselves, each other, and the world we inhabit. In this course, we hope that students develop critical thinking skills and come to know how Canada has been influenced by conflict, political decisions, ideology, changes in society, history and geography. Some of the **Big Ideas** include the following essential questions:

**Government: Why bother voting? What does active citizenship look like in Canadian politics?**

**History: Is there a "Canadian" identity? What historical and contemporary injustices challenge the narrative and identity of Canada as an inclusive, multicultural society?**

**Geography: Are we too big for our planet? Challenges Facing Canada & the Global Community.**

Students completing Social Studies 10 will have a sense of their own place in Canada's past and present, and their role in shaping the future.

### SS: SOCIAL STUDIES 10 PATHWAYS

Prerequisite: Social Studies 9

Students will follow the same core curriculum as Social Studies 10. However, students will have enriched opportunities such as field trips and special projects to further explore curricular areas of interest.



### SS: EXPLORATIONS IN SOCIAL STUDIES 11

Prerequisite: Social Studies 10

The curriculum for Explorations in Social Studies 11 is designed to provide flexibility for teachers and students while ensuring that the rigorous provincial curriculum standards are met. The class works collaboratively with the teacher to create the course topics for their school year!

Some of the **Big Ideas** may be adapted from grade 12 courses such as Human Geography, Political Studies, 20th Century World History, Contemporary Indigenous Studies, Genocide Studies, Law Studies, and Social Justice.

### SS: LAW STUDIES 12

Prerequisite: Explorations in Social Studies 11

In Social Studies, it is our hope that students learn more about themselves, each other, and the world we inhabit. Law Studies 12 is an introductory course, which examines Canada's laws and legal institutions. Students will be successful in this course when they can demonstrate their capacity to think critically, interpret evidence, assess and defend positions, conduct inquiry related to our course topics.

#### **Big Ideas:**

Understanding legal rights and responsibilities allows citizens to reflect critically on the role of law in society.

Laws are often a force for positive change, but they can also be misused.

A society's legal framework affects all aspects of people's lives.

Laws are interpreted and these interpretations evolve over time.

### SS: SOCIAL JUSTICE 12 - on-line

Social justice is defined as "the full participation and inclusion of all people in society, together with the promotion and protection of their legal, civil, and human rights" (BC Ministry of Education, Social Justice 12 IRP). The aim of this course is to raise students' awareness of and increase their ability to analyze and advocate for issues of social equity and justice. Through active participation, critical analysis, and reflection, students will learn about social justice issues and work towards becoming responsible agents of change. Topics that may be explored include **human rights, values, self-identity, globalization, climate justice, media awareness, race/ethnicity, poverty, genocide, and issues affecting women, LGBTQ, and Aboriginal peoples.**

#### **Big Ideas:**

Social justice issues are interconnected.

Individual worldviews shape and inform the understanding of social justice issues.

The causes of social justice are complex and have lasting impacts on society.

Social justice initiatives are complex and have lasting impacts on society.

**\*This course is offered on-line, delivered by a Cambie staff member, through the Richmond Virtual School.**



### CL: CAREER LIFE EDUCATION 11

The aim of Career Life Education 11 is to enable students to develop the skills they need to become self-directed individuals who set goals, make thoughtful decisions, and take responsibility for pursuing their goals throughout life. Students will plan for successful learning in the Graduation Program, explore a wide range of post-secondary education and career options, develop financial literacy related to pursuing their education and career goals, and begin planning for their transition beyond secondary school.

### CL: CAREER LIFE EDUCATION 11 - online

The aim of Career Life Education 11 is to enable students to develop the skills they need to become self-directed individuals who set goals, make thoughtful decisions, and take responsibility for pursuing their goals throughout life. Students will plan for successful learning in the Graduation Program, explore a wide range of post-secondary education and career options, develop financial literacy related to pursuing their education and career goals, and begin planning for their transition beyond secondary school.

**\*This version of the course is offered on-line, delivered by a Cambie staff member, through the Richmond Virtual School.**

### CL: CAREER LIFE CONNECTIONS (INCLUDING THE CAPSTONE)

**Prerequisite: None**

Career Life Connections is a 4-credit program required for Grade 12 Graduation. It is intended to assist students in making preparations so they have a successful transition to life after secondary school. As students at Cambie move through Grades 10– 12, they will further refine their understanding of the links between personal development and their career decisions. They consider regional and global trends to reflect on career possibilities, refine their understanding of safety requirements associated with occupational areas and related technologies, and further develop and refine their understanding of career possibilities through planning, practice, and application of competencies and knowledge. Curricular competencies for Career Life Connections and the Capstone Project will be developed through assignments, presentations, and student reflections during Cambie Conference Days through Grades 10 - 12.

### CL: PEER TUTORING 12

**Prerequisite:** Good work habits. Excellent personal and social responsibility skills. Demonstrated maturity and thoughtfulness in working with staff and students in school. Potential students are required to complete an [online application form](#) for Peer Tutoring. Upon acceptance, your counsellor will help you to replace an elective with Peer Tutoring.

**Objectives:** During this course, tutors will develop: leadership skills, self-confidence and self-esteem; an understanding of the teaching and learning process. Students will act as positive role models in support of students, and provide support to teachers and students in their classrooms.

**Instruction:** Students are expected to be in full attendance in the classroom in which they are serving as a peer tutor. Finding a placement (teacher) to work with will be the responsibility of each student during the first week of September.

**Evaluation:** Your sponsor teacher will be supervising you in the classroom, monitoring your attendance, assigning you tasks to perform in class, and completing an evaluation checklist prior to each reporting period. Assignments to promote self-reflection about your growth in the role will be assigned.

**PLEASE NOTE:** Peer Tutoring is a Grade 12 course. Grade 11s may be considered if there is space. If you are in grade 11, and would like to take this course, please speak to your counsellor. You will be placed on a wait list for this course.



### PE: INTRODUCTION TO MEDICAL SCIENCE 11

**Prerequisite: None**

The 'Introduction to Medical Science 11' curriculum enables students to complete their Canadian Red Cross Standard First Aid (SFA) 'CPR-C' HCP and First Responders (FR) Certifications, through a full year course.

The Canadian Red Cross First Responder Program provides our students with advanced first aid and pre-hospital care training. This curriculum is hands-on, challenging, and provocative. It is designed to give students knowledge, practical skills, and an opportunity to complete the program with professional certification(s). The professional certification(s) that the students receive enable them to volunteer their services as 'on site medical assistants' within our school, as well as at 'outside community events'.

**Content:**

- Anatomy, Physiology, and Pathophysiology
- Patient Assessment
- Airway Management and Respiratory Emergencies
- Circulatory Emergencies
- Shock
- Hemorrhage and Soft Tissue Trauma
- Musculoskeletal Injuries
- Head and Spinal Injuries

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'CPR-C' HCP is required when applying to any post-secondary health care program (such as nursing, dentistry, etc). This course provides students with a competitive advantage when seeking to pursue professional training in medicine, or other health related programs.

The cost associated with this level of training (SFA, CPR-C, and FR) is significantly reduced, when compared to completing the same certifications at a post-secondary or specific training institution.

Course Fee: \$375.00. Cost of the course covers the following items:

- Canadian Red Cross Manual
- Certifications
- Medical Supplies/Equipment
- Lab costs

### PE: INTRODUCTION TO MEDICAL SCIENCE 12

**Prerequisite: None**

\*\*Introduction to Medical Science 11 Recommended

The 'Introduction to Medical Science 12' course will present students with an introductory survey of human anatomy, physiology and pathophysiology, athletic training and taping, injury prevention and rehabilitation, nutrition, and contemporary issues in health. Introduction to Medical Science 12 is an excellent foundation course for students entering into any medical or health-related post-secondary program.

**Content:**

- Anatomy, Physiology, and Pathophysiology
- Injury prevention, functional testing, and rehabilitation of sports and workplace injuries
- Athletic Training and Taping
- Nutrition (diet analysis)
- Workshops/Labs: Osteology/Arthrology Lab, Blood Pressure Lab, Blood Glucose Lab, Substance Isolation Workshop, Intubation & Injections, Autopsy, Coroner's Inquest, ECG Workshop, Confidentiality Workshop, Drugs in Sport and Designer Drug Presentations, etc.

Course Fee: \$50.00.

- Athletic Taping Supplies
- Lab Supplies

### PE: WORK EXPERIENCE INTRODUCTION TO MEDICAL SCIENCE 11/12

Please see the Work Experience section of the Cambie Program Planning book.



### STY 12: ASSIGNED STUDY TIME

This block is for grade 12 students who demonstrate good social responsibility and have a demanding course load. Please consult with your counsellor.

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### TE: APPLIED DESIGN, SKILLS & TECHNOLOGIES 8

Students will work in a variety of areas to develop and use technology, develop plans and design products within their ability. They will also learn about technical requirements of various careers and safety in addition to learning about the use of different materials and their possible use in the future. Areas looked at will be in Electronics, Woodwork, Technology Design and Fabrication, and CAD.

### TE: COMPUTER TECHNOLOGY 9

#### **Prerequisite: None**

Computer Technology is designed for students with little or no experience using computers. You will learn how to create videos animations, sound files and programs. We will review the history and development of the computer and also a look at some of the elementary jargon used to describe a computer. Students will work with adobe Photoshop, Adobe illustrator, comic life, programming in Swift (apps on iPhone), Flash animation, 3-D printing, Garage band, iMovie, Web Page design using HTML, Word processing and Spreadsheets. This year we will also explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument. All this for a portfolio of your work.

### TE: COMPUTER TECHNOLOGY 10

#### **Prerequisite: None.**

**Computer Technology 10 is designed for both NEW and RETURNING Computer Technology students. Course "level" will be assigned by the instructor in September – based on previous Computer Technology experience.**

NEW Computer Technology Students (Level 1) with little or no experience using computers will learn how to create videos animations, sound files and programs. We will review the history and development of the computer and also a look at some of the elementary jargon used to describe a computer. Students will work with adobe Photoshop, Adobe illustrator, comic life, programming in Swift (apps on iPhone), Flash animation, 3-D printing, Garage band, iMovie, Web Page design using HTML, Word processing and Spreadsheets. This year we will also explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument. All this for a portfolio of your work.

RETURNING Computer Technology Students (Level 2) will further their experience in working with computers. We take you through more advanced Photoshop features. You will learn to use special effects in videos like blue screen and work with Maya to create high-end animations. Design using Illustrator advanced and Fireworks and Adobe After Effects for special-effects videos. And level two we continue programming in Swift learning about apps for your iPhone and HTML web page design while still using a 3D printer. As a final project, students will create a stop action clay animation video with music created in GarageBand. if you are looking for a career in computers then here is where you start. This year we hope to explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument This course satisfies the requirement for an applied skills credit. All this for a portfolio of your work.



### TE: COMPUTER TECHNOLOGY 11

**Prerequisite: None.**

**Computer Technology 11 is designed for both NEW and RETURNING Computer Technology students. Course “level” will be assigned by the instructor in September – based on previous Computer Technology experience.**

NEW Computer Technology Students (Level 1) with little or no experience using computers will learn how to create videos animations, sound files and programs. We will review the history and development of the computer and also a look at some of the elementary jargon used to describe a computer. Students will work with adobe Photoshop, Adobe illustrator, comic life, programming in Swift (apps on iPhone), Flash animation, 3-D printing, Garage band, iMovie, Web Page design using HTML, Word processing and Spreadsheets. This year we will also explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument. All this for a portfolio of your work.

RETURNING Computer Technology Students (Level 2) will further their experience in working with computers. We take you through more advanced Photoshop features. You will learn to use special effects in videos like blue screen and work with Maya to create high-end animations. Design using Illustrator advanced and Fireworks and Adobe After Effects for special-effects videos. And level two we continue programming in Swift learning about apps for your iPhone and HTML web page design while still using a 3D printer. As a final project, students will create a stop action clay animation video with music created in GarageBand. if you are looking for a career in computers then here is where you start. This year we hope to explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument This course satisfies the requirement for an applied skills credit. All this for a portfolio of your work.

THIRD YEAR Computer Technology Students (Level 3) will appreciate the roles, uses and implications of computers in society and issues like Fake News, Bit Coins, and the use of the Darknet. At the same time you will demonstrate programming skills various pieces of computer hardware and their functions. Students will work with Adobe Photoshop, 3D printing, Illustrator, Adobe Premiere, Maya, Adobe After Effects, programming in swift, HTML in Dreamweaver. All this for a portfolio of your work. This year we hope to explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument. The course satisfies the requirement for an applied skills credit.

### TE: COMPUTER TECHNOLOGY 12

**Prerequisite: None.**

**Computer Technology 12 is designed for both NEW and RETURNING Computer Technology students. Course “level” will be assigned by the instructor in September – based on previous Computer Technology experience.**

NEW Computer Technology Students (Level 1) with little or no experience using computers will learn how to create videos animations, sound files and programs. We will review the history and development of the computer and also a look at some of the elementary jargon used to describe a computer. Students will work with adobe Photoshop, Adobe illustrator, comic life, programming in Swift (apps on iPhone), Flash animation, 3-D printing, Garage band, iMovie, Web Page design using HTML, Word processing and Spreadsheets. This year we will also explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument. All this for a portfolio of your work.

RETURNING Computer Technology Students (Level 2) will further their experience in working with computers. We take you through more advanced Photoshop features. You will learn to use special effects in videos like blue screen and work with Maya to create high-end animations. Design using Illustrator advanced and Fireworks and Adobe After Effects for special-effects videos. And level two we continue programming in Swift learning about apps for your iPhone and HTML web page design while still using a 3D printer. As a final project, students will create a stop action clay animation video with music created in GarageBand. if you are looking for a career in computers then here is where you start. This year we hope to explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument This course satisfies the requirement for an applied skills credit. All this for a portfolio of your work.

THIRD YEAR Computer Technology Students (Level 3) will appreciate the roles, uses and implications of computers in society and issues like Fake News, Bit Coins, and the use of the Darknet. At the same time you will demonstrate programming skills various pieces of computer hardware and their functions. Students will work with Adobe Photoshop, 3D printing, Illustrator, Adobe Premiere, Maya, Adobe After Effects, programming in swift, HTML in Dreamweaver. All this for a portfolio of your work. This year we hope to explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument. The course satisfies the requirement for an applied skills credit.

FOURTH YEAR Computer Technology Students (Level 4) will gain information on job opportunities in different fields like computer software engineer, computer support specialist, programming and networking Students will work with Adobe Photoshop, Adobe illustrator, Adobe Premiere, Maya, Adobe After Effects and programming in swift and HTML. Rapid evolution in this area and its’ impact upon society has cause this curriculum to change almost yearly. This year we hope to explore using Minecraft as a programming tool and use VR (virtual reality) as a learning instrument; all this for a portfolio of your work. This course satisfies the requirement for an applied skills credit.



### TE: ELECTRONICS AND ROBOTICS 9

**Prerequisite: None**

This course will introduce students to the exciting and fast-paced technology field of electronics and robotics. Students will learn about electronics theory, including but not limited to electricity, printed circuit boards, active and passive components, semiconductors, integrated circuits, analogue and digital circuits, and testing equipment through project work and theory sessions. Students will be introduced to basic computer programming using Arduino. Through theory, demonstrations, and hands-on experimentation, students will learn the invaluable skills to design and build their own electronic circuits.

### TE: ELECTRONICS AND ROBOTICS 10

**Prerequisite: None.**

**Electronics and Robotics 10 is designed for both NEW and RETURNING Electronics and Robotics students. Course "level" will be assigned by the instructor in September – based on previous Electronics and Robotics experience.**

This course is an exciting combination of electronics and robotics.

NEW Electronics and Robotics Students (Level 1) will learn about electronics theory, including but not limited to electricity, printed circuit boards, active and passive components, semiconductors, integrated circuits, analogue and digital circuits, and testing equipment through project work and theory sessions. Students will be introduced to basic computer programming using Arduino. Through theory, demonstrations, and hands-on experimentation, students will learn the invaluable skills to design and build their own electronic circuits.

RETURNING Electronics and Robotics Students (Level 2) will build on knowledge gained in the level 1 course and explore the world of amplifiers, power supplies, programming and robotics. Students will be introduced to basic computer programming using Arduino and C/C+++. The course is a combination of applied theory and project work. It will include bread-boarding, soldering and building projects. You will have an opportunity to work on teams that will build competitive VEX robots. There is an opportunity to take field trips to competitions that involve both electronics and robotics events. This course is a preferred prerequisite to all electronics and engineering programs and gives students a competitive edge when applying for programs of this nature, especially at BCIT, UBC and SFU.

### TE: ELECTRONICS AND ROBOTICS 11

**Prerequisite: None.**

**Electronics and Robotics 11 is designed for both NEW and RETURNING Electronics and Robotics students. Course "level" will be assigned by the instructor in September – based on previous Electronics and Robotics experience.**

This course is an exciting combination of electronics and robotics.

NEW Electronics and Robotics Students (Level 1) will learn about electronics theory, including but not limited to electricity, printed circuit boards, active and passive components, semiconductors, integrated circuits, analogue and digital circuits, and testing equipment through project work and theory sessions. Students will be introduced to basic computer programming using Arduino. Through theory, demonstrations, and hands-on experimentation, students will learn the invaluable skills to design and build their own electronic circuits.

RETURNING Electronics and Robotics Students (Level 2) will build on knowledge gained in the level 1 course and explore the world of amplifiers, power supplies, programming and robotics. Students will be introduced to basic computer programming using Arduino and C/C+++. The course is a combination of applied theory and project work. It will include bread-boarding, soldering and building projects. You will have an opportunity to work on teams that will build competitive VEX robots. There is an opportunity to take field trips to competitions that involve both electronics and robotics events. This course is a preferred prerequisite to all electronics and engineering programs and gives students a competitive edge when applying for programs of this nature, especially at BCIT, UBC and SFU.

THIRD YEAR Electronic and Robotics Students (Level 3) will be involved in designing and engineering projects around the core areas of electronics and robotics. Microprocessors, robotics and digital electronics form the core of this course which builds on previous knowledge. The course will have a combination of theory and practical hands on opportunities to build and experiment with circuits. This is an exciting opportunity to develop skills and learn new ones such as programming Arduino, C/C++ and microprocessors and putting them to work in a real world environment. Students will again be offered opportunities to compete in events such as VEX robotics competitions and also to take part in Skills Canada events in Electronics and also Robotics.





### TE: ELECTRONICS AND ROBOTICS 12

**Prerequisite: None.**

**Electronics and Robotics 12 is designed for both NEW and RETURNING Electronics and Robotics students. Course “level” will be assigned by the instructor in September – based on previous Electronics and Robotics experience.**

This course is an exciting combination of electronics and robotics.

NEW Electronics and Robotics Students (Level 1) will learn about electronics theory, including but not limited to electricity, printed circuit boards, active and passive components, semiconductors, integrated circuits, analogue and digital circuits, and testing equipment through project work and theory sessions. Students will be introduced to basic computer programming using Arduino. Through theory, demonstrations, and hands-on experimentation, students will learn the invaluable skills to design and build their own electronic circuits.

RETURNING Electronics and Robotics Students (Level 2) will build on knowledge gained in the level 1 course and explore the world of amplifiers, power supplies, programming and robotics. Students will be introduced to basic computer programming using Arduino and C/C++ . The course is a combination of applied theory and project work. It will include bread-boarding, soldering and building projects. You will have an opportunity to work on teams that will build competitive VEX robots. There is an opportunity to take field trips to competitions that involve both electronics and robotics events. This course is a preferred prerequisite to all electronics and engineering programs and gives students a competitive edge when applying for programs of this nature, especially at BCIT, UBC and SFU.

THIRD YEAR Electronic and Robotics Students (Level 3) will be involved in designing and engineering projects around the core areas of electronics and robotics. Microprocessors, robotics and digital electronics form the core of this course which builds on previous knowledge. The course will have a combination of theory and practical hands on opportunities to build and experiment with circuits. This is an exciting opportunity to develop skills and learn new ones such as programming Arduino, C/C++ and microprocessors and putting them to work in a real world environment. Students will again be offered opportunities to compete in events such as VEX robotics competitions and also to take part in Skills Canada events in Electronics and also Robotics.

FOURTH YEAR Electronic and Robotics Students (Level 4) will have an opportunity to choose an area to explore in more depth. This area of the student's choice can be in digital electronics, autonomous robotics or a more in depth study of microprocessors (Arduino and Pic microcontrollers). Students should be self-motivated, and they will be guided through their chosen area of study and gain more experience and confidence as they work to complete a major project in one of the three disciplines. This will be a year-long course during which students will be able to choose their projects and pace of study. Students should have already completed level three, and this course is suited to those students planning technical careers.

### TE: CADD (COMPUTER AIDED DRAFTING AND DESIGN) 9

**Prerequisite: None**

Do you like making things?

Students who have an interest in the areas of 3D Modelling and Animation, Architecture, Interior Design, Construction, Engineering and Product design will find this course interesting, invaluable, and fun! This introductory course targets students with little or no previous CADD experience and introduces you to the very latest computer programs, Autodesk Inventor, Fusion 360, 3DS Max, Maya, AutoCAD, Architecture, and Revit. Throughout this course, you will explore the Design Cycle from initial concept to finished design and fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. Create and explore undiscovered worlds and the latest developments in Animation using 3DS Max and Maya. You will also investigate Architectural styles, and design throughout history. Creativity and critical thought will be encouraged throughout while learning new skills in a fun and relaxed atmosphere. No previous computer experience is necessary for the successful completion of this course.

CADD Class, Take It and Make It!



### TE: CADD (COMPUTER AIDED DRAFTING AND DESIGN) 10

**Prerequisite: None.**

**CADD 10 is designed for both NEW and RETURNING CADD students. Course "level" will be assigned by the instructor in September – based on previous CADD experience.**

NEW CADD Students (Level 1) should have an interest in the areas of 3D Modelling and Animation, Architecture, Interior Design, Construction, Engineering and Product design will find this course interesting, invaluable, and fun! This introductory course targets students with little or no previous CADD experience and introduces you to the very latest computer programs, Autodesk Inventor, Fusion 360, 3DS Max, Maya, AutoCAD, Architecture, and Revit. Throughout this course, you will explore the Design Cycle from initial concept to finished design and fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. Create and explore undiscovered worlds and the latest developments in Animation using 3DS Max and Maya. You will also investigate Architectural styles, and design throughout history. Creativity and critical thought will be encouraged throughout while learning new skills in a fun and relaxed atmosphere. No previous computer experience is necessary for the successful completion of this course.

RETURNING CADD Students (Level 2) build on the skills learned in CADD 9. You will have the opportunity to explore in greater depth from the field of your choice, whether its Animation, Architecture, or Engineering and Design. The programs you will use, but are not limited to, are Autodesk Inventor, Fusion 360, 3DS Max, Maya, Mudbox, AutoCAD, Architecture, and Revit. New areas of exploration include an introduction to career options, the product development process and advanced manufacturing techniques including fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. You will learn about what makes "Good Design", the characteristics of quality construction, construction terminology, building engineering, and have the opportunity to design and draft a set of house plans. Or students may choose to advance their Animation skills by exploring the 12 Principles of Animation and utilizing the elements of Art and the Principles of Design in their work. If you have an interest in areas that include Animation, Architecture and Construction, Engineering and Design, you will find the next level intriguing, engaging, highly valuable, and especially, fun!

### TE: CADD (COMPUTER AIDED DRAFTING AND DESIGN) 11

**Prerequisite: None.**

**CADD 11 is designed for both NEW and RETURNING CADD students. Course "level" will be assigned by the instructor in September – based on previous CADD experience.**

NEW CADD Students (Level 1) should have an interest in the areas of 3D Modelling and Animation, Architecture, Interior Design, Construction, Engineering and Product design will find this course interesting, invaluable, and fun! This introductory course targets students with little or no previous CADD experience and introduces you to the very latest computer programs, Autodesk Inventor, Fusion 360, 3DS Max, Maya, AutoCAD, Architecture, and Revit. Throughout this course, you will explore the Design Cycle from initial concept to finished design and fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. Create and explore undiscovered worlds and the latest developments in Animation using 3DS Max and Maya. You will also investigate Architectural styles, and design throughout history. Creativity and critical thought will be encouraged throughout while learning new skills in a fun and relaxed atmosphere. No previous computer experience is necessary for the successful completion of this course.

RETURNING CADD Students (Level 2) build on the skills learned in Level One. You will have the opportunity to explore in greater depth from the field of your choice, whether its Animation, Architecture, or Engineering and Design. The programs you will use, but are not limited to, are Autodesk Inventor, Fusion 360, 3DS Max, Maya, Mudbox, AutoCAD, Architecture, and Revit. New areas of exploration include an introduction to career options, the product development process and advanced manufacturing techniques including fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. You will learn about what makes "Good Design", the characteristics of quality construction, construction terminology, building engineering, and have the opportunity to design and draft a set of house plans. Or students may choose to advance their Animation skills by exploring the 12 Principles of Animation and utilizing the elements of Art and the Principles of Design in their work. If you have an interest in areas that include Animation, Architecture and Construction, Engineering and Design, you will find the next level intriguing, engaging, highly valuable, and especially, fun!

THIRD YEAR CADD Students (Level 3) have the opportunity to further develop their 3D Modelling, Drafting, and Animation skills. Working with the teacher, students will further focus and refine their area of study so they can concentrate their skill building towards their career goals. Students may explore Residential or Commercial Architecture, Engineering and Design, or Advanced 3-D Computer Animation. With teacher approval, students will work on self-directed projects tailored to their interests (e.g. Architectural model building, Digital Fabrication, Short Animations, Game design, etc...). Upon successful completion of this course, students will have a solid foundation to pursue post-secondary studies in areas including, but not limited to, 3D Design, Computer Animation, Architecture, Engineering, and Construction.



### TE: CADD (COMPUTER AIDED DRAFTING AND DESIGN) 12

**Prerequisite: None.**

**CADD 12 is designed for both NEW and RETURNING CADD students. Course "level" will be assigned by the instructor in September – based on previous CADD experience.**

NEW CADD Students (Level 1) should have an interest in the areas of 3D Modelling and Animation, Architecture, Interior Design, Construction, Engineering and Product design will find this course interesting, invaluable, and fun! This introductory course targets students with little or no previous CADD experience and introduces you to the very latest computer programs, Autodesk Inventor, Fusion 360, 3DS Max, Maya, AutoCAD, Architecture, and Revit. Throughout this course, you will explore the Design Cycle from initial concept to finished design and fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. Create and explore undiscovered worlds and the latest developments in Animation using 3DS Max and Maya. You will also investigate Architectural styles, and design throughout history. Creativity and critical thought will be encouraged throughout while learning new skills in a fun and relaxed atmosphere. No previous computer experience is necessary for the successful completion of this course.

RETURNING CADD Students (Level 2) build on the skills learned in Level One. You will have the opportunity to explore in greater depth from the field of your choice, whether its Animation, Architecture, or Engineering and Design. The programs you will use, but are not limited to, are Autodesk Inventor, Fusion 360, 3DS Max, Maya, Mudbox, AutoCAD, Architecture, and Revit. New areas of exploration include an introduction to career options, the product development process and advanced manufacturing techniques including fabrication using the latest technology, 3D printing/plotting, CNC machining, and/or laser cutting. You will learn about what makes "Good Design", the characteristics of quality construction, construction terminology, building engineering, and have the opportunity to design and draft a set of house plans. Or students may choose to advance their Animation skills by exploring the 12 Principles of Animation and utilizing the elements of Art and the Principles of Design in their work. If you have an interest in areas that include Animation, Architecture and Construction, Engineering and Design, you will find the next level intriguing, engaging, highly valuable, and especially, fun!

THIRD YEAR CADD Students (Level 3) have the opportunity to further develop their 3D Modelling, Drafting, and Animation skills. Working with the teacher, students will further focus and refine their area of study so they can concentrate their skill building towards their career goals. Students may explore Residential or Commercial Architecture, Engineering and Design, or Advanced 3-D Computer Animation. With teacher approval, students will work on self-directed projects tailored to their interests (e.g. Architectural model building, Digital Fabrication, Short Animations, Game design, etc...). Upon successful completion of this course, students will have a solid foundation to pursue post-secondary studies in areas including, but not limited to, 3D Design, Computer Animation, Architecture, Engineering, and Construction.

FOURTH YEAR CADD Students (Level 4) will further develop and refine the skills acquired over three years of study. This is a primarily self-directed course that builds on previous experience. You have the choice and opportunity to explore in depth the field of your desire, 3D Computer Animation, Residential and/or Commercial Architecture, or Engineering Design and Manufacturing. Upon successful completion of this course, students will have a solid foundation to pursue post-secondary studies in areas including, but not limited to, 3D Design, Architecture, Drafting, Engineering, Construction, and Computer Animation.

### TE: WOODWORK 9

**Prerequisite: None**

Welcome to the fun, informative, and engaging class of Woodworking. You will learn how to work in a safe and productive manner with all of the tools, machinery, and equipment in the Wood Technology shop. Lectures and demonstrations include topics on safe shop behavior, accident prevention, reporting procedures, and a safety on a wide range of equipment and tool use. Beside the standard "Milling Procedure", you will learn, how to read and draw plans, laminating and gluing (Cutting Boards), woodturning on a lathe (Pens), joinery (Boxes), hand tools and carving (Spoons), and much, much more. Assignments will encourage students to exercise their creative design abilities and express their individuality within the scope and conditions of the projects. Occasionally, "open shop times" are offered for the more serious and committed students who require more time for the challenging projects. The course will be composed of lots of hands on experiences, including demonstrations, project construction, and confidence building and most importantly you will enjoy learning and making projects to take home and cherish.



### TE: WOODWORK 10

**Prerequisite: None**

**Woodwork 10 is designed for both NEW and RETURNING Woodwork students. Course "level" will be assigned by the instructor in September – based on previous Woodwork experience.**

NEW Woodwork Students (Level 1) will learn how to work in a safe and productive manner with all of the tools, machinery, and equipment in the Wood Technology shop. Lectures and demonstrations include topics on safe shop behavior, accident prevention, reporting procedures, and a safety on a wide range of equipment and tool use. Beside the standard "Milling Procedure", you will learn, how to read and draw plans, laminating and gluing (Cutting Boards), woodturning on a lathe (Pens), joinery (Boxes), hand tools and carving (Spoons), and much, much more.

RETURNING Woodwork Students (Level 2) will expand their understanding of woodworking processes and safety through larger and more complex furniture projects. Building upon the skills you learned in level 1 or Wood 9, you will be able to design and build your own custom skateboard, be introduced to furniture design and construction, wood sculpture, turning bowls, and many more engaging projects and techniques to help you refine your quality and craft. New areas of exploration include construction terminology, an introduction to career options, advanced manufacturing techniques, and you will learn about what makes "Good Design" and the characteristics of quality construction. The skills that you learn in this class you will continue to use for the rest of your life.

### TE: WOODWORK 11

**Prerequisite: None.**

**Woodwork 11 is designed for both NEW and RETURNING Woodwork students. Course "level" will be assigned by the instructor in September – based on previous Woodwork experience.**

NEW Woodwork Students (Level 1) will learn how to work in a safe and productive manner with all of the tools, machinery, and equipment in the Wood Technology shop. Lectures and demonstrations include topics on safe shop behavior, accident prevention, reporting procedures, and a safety on a wide range of equipment and tool use. Beside the standard "Milling Procedure", you will learn, how to read and draw plans, laminating and gluing (Cutting Boards), woodturning on a lathe (Pens), joinery (Boxes), hand tools and carving (Spoons), and much, much more.

RETURNING Woodwork Students (Level 2) will expand their understanding of woodworking processes and safety through larger and more complex furniture projects. Building upon the skills you learned in level 1 or Wood 9, you will be able to design and build your own custom skateboard, be introduced to furniture design and construction, wood sculpture, turning bowls, and many more engaging projects and techniques to help you refine your quality and craft. New areas of exploration include construction terminology, an introduction to career options, advanced manufacturing techniques, and you will learn about what makes "Good Design" and the characteristics of quality construction. The skills that you learn in this class you will continue to use for the rest of your life.

THIRD YEAR Woodwork Students (Level 3) are more advanced and the course is designed for students who are capable of more independent work. Working with the teacher, students are given the opportunity to choose from projects that they find challenging and rewarding. New areas of exploration include furniture styles, an exploration of career options, advanced materials and techniques, the characteristics of quality, and tool and equipment maintenance. The projects will advance their knowledge of more complex joinery and techniques, which can include but are not limited to, advanced woodturning, veneering, wood sculpture, furniture design and building, advanced joinery, basic residential wood frame construction techniques, and much, much more.



### TE: WOODWORK 12

**Prerequisite: None.**

**Woodwork 12 is designed for both NEW and RETURNING Woodwork students. Course "level" will be assigned by the instructor in September – based on previous Woodwork experience.**

NEW Woodwork Students (Level 1) will learn how to work in a safe and productive manner with all of the tools, machinery, and equipment in the Wood Technology shop. Lectures and demonstrations include topics on safe shop behavior, accident prevention, reporting procedures, and a safety on a wide range of equipment and tool use. Beside the standard "Milling Procedure", you will learn, how to read and draw plans, laminating and gluing (Cutting Boards), woodturning on a lathe (Pens), joinery (Boxes), hand tools and carving (Spoons), and much, much more.

RETURNING Woodwork Students (Level 2) will expand their understanding of woodworking processes and safety through larger and more complex furniture projects. Building upon the skills you learned in level 1 or Wood 9, you will be able to design and build your own custom skateboard, be introduced to furniture design and construction, wood sculpture, turning bowls, and many more engaging projects and techniques to help you refine your quality and craft. New areas of exploration include construction terminology, an introduction to career options, advanced manufacturing techniques, and you will learn about what makes "Good Design" and the characteristics of quality construction. The skills that you learn in this class you will continue to use for the rest of your life.

THIRD YEAR Woodwork Students (Level 3) are more advanced and the course is designed for students who are capable of more independent work. Working with the teacher, students are given the opportunity to choose from projects that they find challenging and rewarding. New areas of exploration include furniture styles, an exploration of career options, advanced materials and techniques, the characteristics of quality, and tool and equipment maintenance. The projects will advance their knowledge of more complex joinery and techniques, which can include but are not limited to, advanced woodturning, veneering, wood sculpture, furniture design and building, advanced joinery, basic residential wood frame construction techniques, and much, much more.

FOURTH YEAR Woodwork Students (Level 4) are more advanced and the course is designed for students who are capable of independent work. You are given the opportunity to choose projects that you find challenging and rewarding as well as expanding your repertoire of tools and techniques. These can include but are not limited to advanced woodturning, wood sculpture, furniture design and building, cabinetry and joinery, steam bending, basic residential wood frame construction techniques, and many, many more.

### TE: CYBER SECURITY NETWORK CERTIFICATION 11

**Prerequisite: None**

Cambie is one of the few schools offering Cyber Security Network Certification. Upon completion of this one year course, students will have the opportunity to become certified which will open up future employment opportunities in this field. The pay and opportunities are good. Hacking is now the biggest crime on the planet and it is estimated that in the next five years there be of short fall of 1.2 million workers properly trained to prevent such occurrences. Why not train for the future? Students will be responsible for the cost of the certification exam.

### TE: CYBER SECURITY NETWORK CERTIFICATION 12

**Prerequisite: None**

Cambie is one of the few schools offering Cyber Security Network Certification. Upon completion of this one year course, students will have the opportunity to become certified which will open up future employment opportunities in this field. The pay and opportunities are good. Hacking is now the biggest crime on the planet and it is estimated that in the next five years there be of short fall of 1.2 million workers properly trained to prevent such occurrences. Why not train for the future? Students will be responsible for the cost of the certification exam.

### TE: ELECTRONIC PUBLICATION (YEARBOOK) 10

**Prerequisite: None**

Note: This is a locally developed course.

Recommendation: student should have strong work habits and should be willing to work several hours after school on occasion. Students will acquire skills in desktop publishing and will produce the Cambie yearbook. They will be introduced in the use of Adobe InDesign and Photoshop for imaging on a Mac platform. Students will also develop the technical skills required to use a scanner and digital camera, the people skills required to collect information from the school community, and the creative skills required to design page layouts. Students will be expected to work as a team and to meet deadlines.



### TE: ELECTRONIC PUBLICATION (YEARBOOK) 11

**Prerequisite: None**

Note: This is a locally developed course.

Recommendation: student should have strong work habits and should be willing to work several hours after school on occasion. Students will acquire skills in desktop publishing and will produce the Cambie yearbook. They will be introduced in the use of Adobe InDesign and Photoshop for imaging on a Mac platform. Students will also develop the technical skills required to use a scanner and digital camera, the people skills required to collect information from the school community, and the creative skills required to design page layouts. Students will be expected to work as a team and to meet deadlines.

### TE: ELECTRONIC PUBLICATION (YEARBOOK) 12

**Prerequisite: Electronic Publication (Yearbook) 11**

Note: This is a locally developed course.

Recommendation: student should have strong work habits and should be willing to work several hours after school on occasion. Students will acquire skills in desktop publishing and will produce the Cambie yearbook. They will be introduced in the use of Adobe InDesign and Photoshop for imaging on a Mac platform. Students will also develop the technical skills required to use a scanner and digital camera, the people skills required to collect information from the school community, and the creative skills required to design page layouts. Students will be expected to work as a team and to meet deadlines.



### TH: DRAMA 8

Drama 8 is an active course that introduces students to the theatre. Topics covered are mime, voice, movement, improvisation, character work, playmaking and performance basics. Teamwork, self-discipline cooperation and creative risk taking are stressed. Drama 8 builds confidence, improves public speaking skills, and collaborative skills. It's a fun and safe environment where students can explore their own creativity and story-telling potential.

### TH: DRAMA 9

Students need not have previous skills in order to take Drama 9. However only those serious about developing their drama skills should consider this course. Topics covered include playwriting, improvisation, mask work, character creation, Shakespeare, pantomime, lip-sync, reader's theatre, radio plays and scene work. Teamwork, self-discipline and risk taking are stressed. Drama 9 builds confidence, improves public speaking skills, performance skills, collaborative skills and is a fun and active class.

### TH: DRAMA 10

Students need not have previous skills in order to take Drama 10. However only those serious about developing their theatrical skills should consider this course. Topics covered include playwriting, improvisation, mask work, character creation, Shakespeare, pantomime, lip-sync, reader's theatre, radio plays and scene work. Teamwork, self-discipline and risk taking are stressed. Drama 10 builds confidence, improves public speaking skills, performance skills, collaborative skills and is a fun and active class.

### TH: DRAMA 11

Recommended: Drama 8, 9, or 10 or with instructor's permission

This course is about the development of techniques and acting skills. Students will take part in a variety of activities designed to train the actor. Topics covered include playwriting, advanced mime, musical theatre, auditioning, one acts, commedia dell'arte, improvisation, and stage combat. Students must be dedicated, hardworking and committed to creating a theatre ensemble within the class. Students taking this course must be prepared to rehearse and perform outside of regular school hours. Evening participation is mandatory.

### TH: DRAMA 12

Recommended: Drama 8, 9, 10, or 11 or with instructor's permission

This course is about the development of techniques and acting skills. Students will take part in a variety of activities designed to train the actor. Topics covered include playwriting, advanced mime, musical theatre, auditioning, one acts, commedia dell'arte, improvisation, and stage combat. Students must be dedicated, hardworking and committed to creating a theatre ensemble within the class. Students taking this course must be prepared to rehearse and perform outside of regular school hours. Evening participation is mandatory.

### TH: DIRECTING AND SCRIPTWRITING 11

Recommended: Drama 10, Theatre Production 11, or Instructor's permission

This course emphasizes the essentials of script building/development and the techniques of directing for the stage, but also includes technical aspects of theatre production (lighting, sound, set design, stage management, and front of house). Direction is the major focus for this course, but the development of a creative voice and personal style through writing for stage is highlighted and valued. Students are encouraged to tackle projects and subject matter of significance to them. Directing and Script Development requires students to work with other acting students to develop productions for presentation. Assignments in this course include script writing, conducting acting classes, directing and producing scenes/plays, etc.

### TH: DIRECTING AND SCRIPTWRITING 12

Prerequisite: Theatre Production 11 or Instructor's permission

See Theatre Performance - Directing and Scriptwriting 11 (above).



### TH: THEATRE PRODUCTION - STAGECRAFT 11

This is an introductory course designed to give students the opportunity to study the technical aspects of the theatre. Each student will explore the basic principles of set design, costume design, lighting design, make-up techniques and set construction. These activities will run concurrently with the usual work-a-day activities of the theatre such as basic carpentry, costume alterations, painting, etc. Students also will look briefly at the history of stagecraft. Knowledge gained in this course may be put into practice by working on the technical crew of school productions. Students should note that great emphasis in this course is placed on participation and self-discipline.

### TH: THEATRE PRODUCTION - STAGECRAFT 12

Prerequisite: Theatre Production 11

This course provides a further development of several topics of Theatre Production 11 plus new units on costuming and sound. Specifically, students will increase their knowledge and experience with theatre construction techniques, design, painting, lighting, and management. The costuming unit will focus on research and psychology of colour. The sound unit will help students understand how valuable good sound is to a play and will provide students with the knowledge to create a workable sound plot. It is expected that students will read plays and create designs for them. It is also expected that after school time will be used to finish set construction and to hang lights. Students will be the technical crew of productions staged by the Cambie Theatre Department and will find themselves in responsible positions requiring some after school and evening participation.







# CAREERPROGRAMS

SCHOOL DISTRICT NO. 38 (RICHMOND)

## A Future Without Limits



## SD38 CAREER PROGRAM OFFERINGS



[careerprograms.sd38.bc.ca](https://careerprograms.sd38.bc.ca)



@sd38careers



**RICHMOND**  
SCHOOL DISTRICT NO. 38

## I. SD38 Youth Train in Trades (YTIT) Programs

### BENEFITS TO PARTICIPATING IN A DISTRICT YOUTH TRAIN IN TRADES PROGRAM:

- ❑ **TUITION PAID** (by Richmond School District #38 at a savings of \$2500 - \$4000)
- ❑ **Early admission** to post-secondary studies while in high school
- ❑ Earn **TRIPLE CREDITS** for
  - high school – courses count as grade 12 electives
  - post-secondary school – courses count as university/college credit
  - Industry Training Authority (ITA) – credit for Level 1 technical training
- ❑ Gain a **competitive advantage** – earning potential right out of high school
- ❑ **Earn Work-Based Hours** toward trade certification by taking a trades program



### WHO SHOULD APPLY... ATTRIBUTES AND QUALIFICATIONS OF APPLICANTS:

- ❑ Prior ADST/Tech Ed experience an asset (comfortable using tools and enjoy hands-on work)
- ❑ Demonstrated level of maturity suitable to a post-secondary environment
- ❑ Physically able to work in a trades environment
- ❑ Strong English language skills to communicate and interpret information and technical language
- ❑ Strong Math and Science skills for solving problems and making decisions
- ❑ Driver's license is an asset (a must in some trades)
- ❑ Has not achieved Ministry of Education graduation prior to program registration
- ❑ Must complete program prior to reaching the age of 20 (returning grads may be considered)

### APPLICATION PROCESS AND WHEN TO APPLY:

- ❑ Pick up an application from your counselling area (see **Career Programs display board**) OR download from the District Career Programs Office website (<http://careerprograms.sd38.bc.ca>)
- ❑ **QUESTIONS? Contact the Career Programs Office staff**
- ❑ Submit completed application to the District Career Programs Office by the due date listed on the front of the application form (**1<sup>st</sup> due date:** Late February/Early March      **2<sup>nd</sup> due date:** Early April)
- ❑ Students are advised to apply early, as there are limited seats for these programs
- ❑ Qualifying applications will receive an invitation to attend an interview
- ❑ **NOTE:** Quality of applications will be assessed based on the following criteria: academic achievement, related course work, work habits, attendance/punctuality, overall behavior and attitude

### COST OF YOUTH TRAIN IN TRADES PROGRAMS:

- ❑ Post-secondary tuition is covered by the Richmond School District – a significant savings
- ❑ Students are responsible for all other associated program fees, books, equipment, tools and consumable items. These are outlined on the second page of the Youth Train in Trades application form.

**\*\*\*Due dates for this Post-Secondary program on page two of YTIT application form\*\*\***

## II. SD38 Youth Work in Trades (YWIT) Programs

### QUALIFICATIONS FOR YOUTH WORK IN TRADES:

- ❑ **Paid employment in a recognized trade**, either full or part-time
- ❑ Students must be **15-19 years old**
- ❑ Have a **certified supervisor** (Certificate of Qualification, Red Seal, or Journeyperson)
- ❑ Check out [www.itabc.ca](http://www.itabc.ca) to see the 150 trades that are recognized in BC (and qualify for YWIT)



### BENEFITS OF DISTRICT YOUTH WORK IN TRADES PROGRAM:

- ❑ Student is **registered as an apprentice** through the ITA
- ❑ Paid work hours count toward **Level 1 trade certification**
- ❑ Student is **sponsored** by employer
- ❑ **Earn up to 16 credits** (four courses) toward high school graduation
- ❑ May qualify to **earn a \$1000 Ministry of Education award**



### III. Other District Partnership Programs for Richmond SD38 Students

Applications for the following opportunities are available through your school counsellor, career advisor or the SD38 Career Programs Office [display.board@sd38.bc.ca](mailto:display.board@sd38.bc.ca) at your school. Also check out (<http://careerprograms.sd38.bc.ca>). **DUE DATES** for all applications can be found on this website or through your counsellor.



Program and Application Due Dates (Approximate)	Overview of Program
<b>RCMP Youth Squad</b> <b>Application Due Date:</b> End of September (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> Spend 8 consecutive Thursday evenings at the Richmond RCMP Detachment learning about careers in policing and several other emergency services, including the Canadian Military, BC Ambulance Service, Richmond Fire/Rescue, Canadian Coast Guard and Canadian Border Services Agency. (Must attend all 8 evenings. Last night is a graduation ceremony for students and their parents.)</p> <p><b>Program Cost:</b> \$80.00 (includes snacks, t-shirt, hat and program graduation)</p> <p><b>Program Timeline:</b> 8 consecutive Thursdays (Mid-October thru Early December)</p> <p><b>Who Can Apply:</b> Students in Grades 10-12 (Preference given to those in grades 11/12)</p>
<b>RCMP Youth Academy</b> <b>Application Due Date:</b> End of November (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> For those interested in a career in policing or law enforcement, this is an intense 9-day (and night) career simulation opportunity that takes place at Camp Stillwood. Students participate in theory and practical sessions, through role-play and various team work activities, including drill practice. Run by RCMP staff, the Academy challenges students, both mentally and physically, giving them confidence and practical skills that will last a lifetime.</p> <p><b>Program Cost:</b> Approximately \$900.00 (includes accommodation, training and food for duration)</p> <p><b>Program Timeline:</b> 9 days late March/early April (overlaps with Easter weekend)</p> <p><b>Who Can Apply:</b> Students in Grades 11 or 12</p>
<b>Skilled Trades Exploration Program (STEP)</b> <b>Application Due Date:</b> Mid-end of May (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> In partnership with our SD38 maintenance and employees (CUPE 716), students have a brief introduction to working in the skilled trades. They select their trade preference (see choices on application), and work for one week in that area. In the fall, look for posters and listen for announcements at your school. <b>NEW: Must be taking a Tech Ed (A057) course.</b></p> <p><b>Program Cost:</b> Students purchase own steel-toed boots</p> <p><b>Program Timeline:</b> One week of work between April - early June</p> <p><b>Who Can Apply:</b> Students in Grades 11 or 12</p>
<b>Link38</b> (Learning in Kwantlen) <b>Application Due Date:</b> May 2019 (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> Gr. 11 students apply for this dual credit program directly through the SD38 Career Programs Office only (not KPU). Courses are taken at Kwantlen Polytechnic University (KPU) course at the Richmond Campus. Course taken <b>MUST</b> directly correspond to student's post-secondary career transition pathway. Application must also be supported by related grade 11/12 courses/activities available at applicant's school. <b>Link38 course offerings vary each year.</b> Course counts for post-secondary and for high school credit (4 credits).</p> <p><b>Program Cost:</b> Students purchase course books; SD38 covers tuition cost of course</p> <p><b>Program Timeline:</b> One night per week from September - December (usually 4-7pm). Day of week is dependent on course taken.</p> <p><b>Who Can Apply:</b> Students in Grades 11 who will be entering grade 12 in the next school year</p>
<b>Camp Ignite</b> <b>Application Due Date:</b> May Check for specific date at <a href="http://www.campignite.ca">www.campignite.ca</a>	<p><b>Description:</b> This 4-day camp is open to girls and provides them with an introduction to a career in firefighting. Firefighters will teach candidates about fitness, nutrition, health and teamwork as they relate to this career area. This program is sponsored by local fire departments and organizations.</p> <p><b>Program Cost:</b> Full cost is covered by local fire halls and sponsor organizations</p> <p><b>Program Timeline:</b> Usually second week in August (dates TBD)</p> <p><b>Who Can Apply:</b> Girls aged 16-18. Students apply directly through <a href="http://www.campignite.ca">www.campignite.ca</a></p>
<b>Roofing</b> <b>3-Day Training Program</b> (Through the Roofing Contractors Association of BC - RCABC) <b>Application Due Date:</b> End of May (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> This 3-day training program will prepare students for a job in the roofing industry. In three days, students get WorkSafeBC approved Fall Protection training, WHMIS certification, Ladder Safety training, Construction Site Safety training, and an introduction to the roofing industry. At the conclusion of the program, students will be registered as apprentices with the RCABC, and will be matched with an RCABC employee. Apprenticeship training will be offered. Find details on website: <a href="http://www.rcabc.org">www.rcabc.org</a></p> <p><b>Program Cost:</b> Approximately \$200 + cost of hard hat, steel toed boots and leather work gloves</p> <p><b>Program Timeline:</b> End of June or first week in July (dates TBD)</p> <p><b>Who Can Apply:</b> Submit application to SD38 Career Programs Office.</p>

### IV. Work Experience (WEX) 12A and 12B

- Students should check the availability of these **school-based courses** with their school counsellor. If offered, students taking these complete 100-120 hours (per course) of volunteer work in their focus area of interest.
- Upon successful completion, students earn 4 credits towards graduation for each of these Ministry of Education courses.

# APPLYING FOR YOUTH TRAIN IN TRADES PROGRAMS

(Priority given to earlier applicants who meet program eligibility requirements)

## PLUMBING

Day 2's (Sept. - June @ Palmer Secondary, including 4 weeks at Piping Industry College)

Through this ITA foundation program, students receive Level 1 technical training in this trade. Students will apply their knowledge by learning how to plan, design, install & service various types of piping systems. They also learn how to use industry specific tools and machinery. Students attend the PIA Piping Industry College for four weeks during the program.

Upon successful completion of this program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 11
- Physically able (tight spaces, moving heavy equipment)
- Successful result on district math assessment

### CREDITS AND CERTIFICATION EARNED

- Pass course work and ITA exam (blended) and earn Level 1 technical training certification (Certificate of Completion)
- Receive 16 credits (4 courses) at Grade 12 level



## PROFESSIONAL COOK 1

Day 2's (Sept. - June @ Richmond Secondary) + subsequent July @ VCC

This ITA foundation program offers students an opportunity to receive Level 1 technical training in this trade. Students perform all phases of kitchen activities including the preparation and presentation of vegetables, soups, sauces, meat, fish and poultry, cold kitchen items, desserts, baking, pastry, basic menu planning/cooking as well as knowledge of safety, sanitation and food storage, and customer relations. Students attend MANDATORY four weeks at VCC in July (includes ITA exam).

Upon successful completion of this program, students will achieve technical training credit for the first of three levels towards Red Seal certification.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 11
- Able to work in a fast-paced, multi-tasking environment
- Successful result on district math assessment
- FoodSafe Level 1 Certification (can complete in summer prior to program start) / Food's coursework an asset

### CREDITS AND CERTIFICATION EARNED

- Pass PC1 ITA exam, practical exam and course work to earn Level 1 technical training certification (Certificate of Qualification)
- Receive 16 credits (3 Cook courses + 1 MEX course) at Grade 12 level
- Any hours worked in the trade are registered with the ITA and go toward PC1 Level 1 completion



## AIRCRAFT MAINTENANCE ENGINEER - M

Full-time @ BCIT - Start date varies (see below\*\*)

ONLY CURRENT GRADE 11 OR 12 STUDENTS MAY APPLY FOR THIS PROGRAM.

An Aircraft Maintenance Engineer (AME) is responsible for the release (certification) of an aircraft after maintenance, inspection, repair or modification. This is an occupation requiring a high degree of responsibility and skill. Some of the skills learned include certifying airworthiness of aircraft, troubleshooting mechanical/electrical systems and adjusting and repairing systems according to strict specifications.

The program consists of 16 continuous months with short breaks between terms. SD38 covers tuition for the first term (4 months) ONLY and students are responsible for the tuition for terms 2, 3 and 4 (months 5-16).

### ENTRY REQUIREMENTS

- Any Math 11/12 (min 60%) AND a Language Arts 12
- Must have Physics 11 (SD38 requirement)
- Successful result - BCIT Mechanical Reasoning Trades pre-entry test
- Recommend Auto-Mechanics 11, any Tech Ed 11
- Good colour vision, and interest in mechanics
- Participation in Air Cadets a plus

### CREDITS AND CERTIFICATION EARNED

- Receive credit for Term 1 (of 4) toward AME certification and 16-20 secondary school Grade 12 credits
- NOTE: Once registered, student must commit to complete this 64 consecutive-week (16 months) program. AME license will be granted by Transport Canada when required work experience is achieved and applicant reaches age 21.
- \*\*Check with Career Programs Office for program start date (likely a fall start date)



## AUTO COLLISION REPAIR TECHNICIAN

Full-time Semester 2 @ VCC (Broadway) - January - August

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. The program uses modern equipment and techniques to train students in a wide range of skills appropriate to this industry. The VCC auto body shop is outfitted with computer-guided frame straighteners, laser measuring systems, and the latest welding equipment. More than 75 per cent of the program is spent working on the auto body shop floor. Projects are done in small teams that simulate the workplace.

Upon successful completion of this program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Relevant ADST (Tech Ed) course work
- Mechanical aptitude, interest and experience
- Successful result on district math assessment

### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 625 work-based hours
- Receive 24 credits (6 courses) at Grade 12 level
- Work experience practicum during program (students find own job)







## AUTO REFINISHING PREP TECHNICIAN

Full-time Semester 2 @ VCC (Broadway) - January - August

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. This involves working on the surfaces of motor vehicles, primarily in the preparation for restoring vehicle finishes once body work has been completed and prior to painting. Some of the duties include: removing layers of sub-coating; mixing undercoats; preparing metal surfaces for painting by spot filling, sanding, and masking; applying primers, and primer surfaces; and cleaning and polishing painted surfaces. More than 75 percent of the program is spent working on the auto body shop floor.

Upon successful completion of this foundation program, students will achieve credit for Level 1 Technical Training towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Any Math 11/12 AND a Language Arts 1/2
- Relevant ADST (Tech Ed) course work an asset
- Good manual dexterity, respiratory health and normal colour vision
- Good hand-eye coordination, eyesight, and line, form & depth perception
- Successful result on district math assessment

### Credits and Certification Earned

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 450 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level
- Work experience practicum during program (students find own job)

## BAKING AND PASTRY ARTS

\*Full-time Semester 1 @ VCC (Pender) - August - January

\*Must apply by first deadline (END OF FEBRUARY IS PREFERRED)

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Bakers prepare doughs, batters and other ingredients leading to the production of breads, cakes, pies, cookies and other baked goods. **Applicants must participate in a one week practical interview in the VCC kitchen in March.** Interviews are the first week in May with the VCC baking department. (Program starts in the summer between grades 11 and 12.)

Upon successful completion of this foundation program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Any Math 11/12 (minimum C-) AND a Language Arts 11 or 12
- FoodSafe Level 1 Certification + 1 week practical interview
- Successful result on math assessment + VCC instructor interview
- Strong attendance / punctuality record; can stand for long time
- Completion of ADST (foods) courses

### Credits and Certification Earned

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 900 work-based hours
- Receive 28 credits (7 courses) at Grade 12 level

## CARPENTRY (FRAMING AND FORMING)

Full-time Semester 2 @ BCIT (Burnaby) - February - July

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Carpenters construct, renovate and repair structures made of wood, steel, concrete and other materials. While conforming to plans, specifications and building codes, they may work on residential, civil, institutional, commercial and industrial projects. Training prepares students for entry-level employment in the carpentry trade. Basic theory and related information along with hands-on shop practice enable students to become competent in basic carpentry tasks.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Any Math 11/12 AND a Language Arts 1/2
- Must be able to work at heights and in adverse weather
- Relevant ADST (Tech Ed) course work an asset (e.g. woodwork)
- Successful results on math and reading assessments

### Credits and Certification Earned

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 450 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level

## CONSTRUCTION ELECTRICIAN

Full-time Semester 2 @ BCIT (Delta Satellite Campus) - February - July

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Construction Electricians plan, design, assemble, install, alter, repair, inspect, verify, commission, connect, operate, maintain and decommission electrical systems. Electrical systems provide heating, lighting, power, alarm, security, communication and control in residential, commercial, institutional, industrial, transportation, marine and entertainment environments.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Language Arts 11/12 (min 67%) AND Physics 11 (min 67%)
- Any Math 11 (min 60%) + successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset (e.g. electrical)
- Should have good hearing, eyesight and hand-eye coordination

### Credits and Certification Earned

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 350 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level





## JOINER (CABINETMAKER)

Full-time Semester 1 or 2 @ BCIT (Burnaby)

This ITA foundation program leads to a Certificate of Completion for level 1 technical training in this trade. Joiners may work in a wide variety of specialties such as cabinetmaking, architectural woodwork (millwork), furniture making, boat interiors and store fixture manufacturing. They use manual and CAD layout or manual and CNC/CAM machines to assemble, install and finish articles that are fabricated with wood, plastic and/or other materials, and are intended to be used as architectural woodwork, millwork and furniture.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11 AND a Language Arts 12
- Proven mechanical aptitude, detail oriented and good physical shape
- Completion of ADST (Tech Ed) Woodwork course an asset
- Successful result on math and reading assessments

### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 475 work-based hours
- Receive 24 credits (6 courses) at Grade 12 level



## MASONRY (if offered by KPU)

Full-time Semester 2 @ KPU (Cloverdale) - February - June

Through this ITA foundation program, students learn to work with brick, concrete and glass block, terra cotta and stone. Masonry involves a lot of physical and outdoor work, using power and hand tools, and material moving equipment. Students will also learn to read blueprints, building codes, industry safety requirements and guidelines for handling hazardous materials. Practical skills are enhanced as they perform outdoor projects utilizing power and hand tools, moving material, constructing simple and ornate walls.

Upon successful completion of this program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 (min 67%) AND a Language Arts 12 (min 67%)
- Good overall health and physical strength for lifting
- Successful result on district math assessment
- Completion of ADST (Tech Ed) courses an asset

### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam, practical exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 400 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level



## METAL FABRICATION

Full-time Semester 2 @ BCIT (Burnaby) - February - July

The Metal Fabrication (Fitter) foundation program, leads to a Certificate of Completion for Level 1 technical training in this trade.

Using ferrous and non-ferrous metals, fabricators deal with the selection, layout, shearing, cutting, punching, drilling, forming, fitting and welding of steel plates and structural steel shapes into products for the forest, mining, construction, transportation and agricultural industries. Typical projects that involve metal fabricators include bridges, buildings, hoppers, conveyors, towers, cranes, heavy mining equipment, logging equipment, and ship parts and equipment.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset
- Good hand-eye coordination and physical condition an asset

### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 450 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level



## MILLWRIGHT/INDUSTRIAL MECHANIC

Full-time Semester 2 @ KPU (Cloverdale) - February - July

Through this ITA foundation program, students are provided opportunities to apply the practical skills taught in hand, power and machine tool use, and perform various shop projects in stationary industrial machinery and mechanical equipment maintenance, troubleshooting, overhauling and installation. Students will be trained in the use of lathes, milling machines and grinders to make customized parts or repairs.

Upon successful completion of this program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Proven mechanical and mathematical aptitude
- Enjoys investigation, analysis and problem solving
- Successful result on district math assessment
- Completion of ADST (Tech Ed) Physics 11 course an asset

### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 425 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level







## ita | YOUTH TRAIN IN TRADES

### PAINTING AND DECORATING (COMMERCIAL)

6 weeks at FTI (Surrey) – Mid-June - July

This ITA Level 1 technical training program provides an overview of the painting industry. Students are introduced to common coatings, surface preparation techniques, and proper use of the tools and materials used in this trade, including airless spray. An extensive safety program includes respirator training, fall protection, ladder and scaffold training, elevated platform training and WHMIS.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

#### ENTRY REQUIREMENTS

- Any Math 10/11 AND a Language Arts 12
- Good colour vision, and interest in mechanics
- Ability to stand for lengths of time and work at heights

#### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion)
- Receive 4 credits (1 course) at Grade 12 level



### MOTORCYCLE TECHNICIAN

Full-time Semester 2 @ BCIT (Burnaby) – January - July

This ITA foundation program provides students the theoretical knowledge and practical skills to enter the trade. It also provides the hands-on training to perform service operations such as new unit assembly and full service; repair of electrical components; and service of chassis, wheels, suspensions, drives, and accessories. Students diagnose, repair, adjust and replace engines, drive trains, suspension and electrical systems on small to medium sized power products.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

#### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset
- Good hand/eye coordination and physical condition an asset

#### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 300 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level



### SHEET METAL

Full-time Semester 1 @ BCIT (Burnaby) – September - January

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Students are exposed to common welding processes and learn how to fabricate, assemble, alter and install sheet metal. Areas of work may include HVAC (Heating, Ventilating and Air Conditioning) ductwork, industrial and residential sheet metal work. Work is also found with hospital and kitchen equipment (stainless steel), industrial exhaust systems, industrial sheet metal work, and roofing and flashing (copper, aluminum, stainless steel and galvanized iron).

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

#### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset
- Good physical condition and able to work at heights

#### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 350 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level



### WELDING

Full-time Semester 2 @ KPU (Cloverdale) – February - August

Through this ITA foundation program, students will learn skills and knowledge that prepare them for employment at the entry level. They develop skills to work safely and effectively using a variety of welding processes and procedures. This program prepares graduates for work with companies that manufacture structural steel and plate work, boilers, heavy machinery, and other ferrous and non-ferrous metal products.

Upon successful completion of this program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

#### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Mathematical aptitude, detail-oriented and good eye-hand coordination
- Successful result on math assessment + KPU instructor interview
- Completion of ADST (Tech Ed) courses an asset

#### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam to earn Level 1 technical training certification (Certificate of Completion) + credit for work-based hours
- Receive 24 credits (6 courses) at Grade 12 level



## District Career Programs Office Team

- District Coordinator – Career Programs: **Terri Lockhart**
- District Facilitator – Career Programs: **David Henderson** (1/2 time)
- District Facilitator – Career Programs: **Peter Thackwray** (Day 2's)
- District Facilitator – Work in Trades: **Harrison Brown**
- Administrative Assistant – Career Programs: **Suzanne Mah**

### Questions for the team?

Email: [careerprograms@sd38.bc.ca](mailto:careerprograms@sd38.bc.ca)

**For specific dates and details of events and application/registration due dates, check the Career Programs website or call 604-668-6000 ext 3766.**

**Also, check the Career Programs information board in your school's counselling area.**

### RCMP Youth Squad

SD38 Gr. 10 – 12's apply to learn about emergency services  
Oct. – Dec. - 8 consecutive Thursdays 6:00-9:00pm

### RCMP Youth Academy

Career simulation open to current Gr. 11/12 students  
8 days/nights @ Camp Stillwood in Spring  
Apps due end of November

### STEP Skilled Trades Exploration Program

Gr. 11/12 students work 1 week alongside  
SD38 trades personnel in Spring  
Should have interest in trades as career option  
Apps due end of January

### Link38

Gr. 12's take KPU course and earn post-secondary  
credit while in high school  
Tuition is paid by SD38  
Apps due May

### Parents as Career Coaches

Evening for secondary school parents to learn how  
to be career coaches for their children  
Choose from one of two dates this year – check District PAC  
or Career Programs website to register

### Youth Train in Trades Program Site Visits/Workshops

See Youth Train in Trades programs in action  
Contact the Career Programs Office to arrange a tour  
Check our website for specific upcoming events

## SD38 Career Programs Office

c/o Cambie Secondary School, 4151 Jacombs Road,  
Richmond, BC V6V 1N7



**CAREER  
PROGRAMS**  
SCHOOL DISTRICT NO. 38 (RICHMOND)



**RICHMOND**  
SCHOOL DISTRICT NO. 38



Ministry of  
Education



## I. SD38 Youth Train in Trades (YTIT) Programs

### BENEFITS TO PARTICIPATING IN A DISTRICT YOUTH TRAIN IN TRADES PROGRAM:

- ❑ **TUITION PAID** (by Richmond School District #38 at a savings of \$2500 - \$4000)
- ❑ **Early admission** to post-secondary studies while in high school
- ❑ Earn **TRIPLE CREDITS** for
  - high school – courses count as grade 12 electives
  - post-secondary school – courses count as university/college credit
  - Industry Training Authority (ITA) – credit for Level 1 technical training
- ❑ Gain a **competitive advantage** – earning potential right out of high school
- ❑ **Earn Work-Based Hours** toward trade certification by taking a trades program



### WHO SHOULD APPLY... ATTRIBUTES AND QUALIFICATIONS OF APPLICANTS:

- ❑ Prior ADST/Tech Ed experience an asset (comfortable using tools and enjoy hands-on work)
- ❑ Demonstrated level of maturity suitable to a post-secondary environment
- ❑ Physically able to work in a trades environment
- ❑ Strong English language skills to communicate and interpret information and technical language
- ❑ Strong Math and Science skills for solving problems and making decisions
- ❑ Driver's license is an asset (a must in some trades)
- ❑ Has not achieved Ministry of Education graduation prior to program registration
- ❑ Must complete program prior to reaching the age of 20 (returning grads may be considered)

### APPLICATION PROCESS AND WHEN TO APPLY:

- ❑ Pick up an application from your counselling area (see **Career Programs display board**) OR download from the District Career Programs Office website (<http://careerprograms.sd38.bc.ca>)
- ❑ **QUESTIONS? Contact the Career Programs Office staff**
- ❑ Submit completed application to the District Career Programs Office by the due date listed on the front of the application form (**1<sup>st</sup> due date:** Late February/Early March      **2<sup>nd</sup> due date:** Early April)
- ❑ Students are advised to apply early, as there are limited seats for these programs
- ❑ Qualifying applications will receive an invitation to attend an interview
- ❑ **NOTE:** Quality of applications will be assessed based on the following criteria: academic achievement, related course work, work habits, attendance/punctuality, overall behavior and attitude

### COST OF YOUTH TRAIN IN TRADES PROGRAMS:

- ❑ Post-secondary tuition is covered by the Richmond School District – a significant savings
- ❑ Students are responsible for all other associated program fees, books, equipment, tools and consumable items. These are outlined on the second page of the Youth Train in Trades application form.

**\*\*\*Due dates for this Post-Secondary program on page two of YTIT application form\*\*\***

## II. SD38 Youth Work in Trades (YWIT) Programs

### QUALIFICATIONS FOR YOUTH WORK IN TRADES:

- ❑ **Paid employment in a recognized trade**, either full or part-time
- ❑ Students must be **15-19 years old**
- ❑ Have a **certified supervisor** (Certificate of Qualification, Red Seal, or Journeyperson)
- ❑ Check out [www.itabc.ca](http://www.itabc.ca) to see the 150 trades that are recognized in BC (and qualify for YWIT)



### BENEFITS OF DISTRICT YOUTH WORK IN TRADES PROGRAM:

- ❑ Student is **registered as an apprentice** through the ITA
- ❑ Paid work hours count toward **Level 1 trade certification**
- ❑ Student is **sponsored** by employer
- ❑ **Earn up to 16 credits** (four courses) toward high school graduation
- ❑ May qualify to **earn a \$1000 Ministry of Education award**

### III. Other District Partnership Programs for Richmond SD38 Students

Applications for the following opportunities are available through your school counsellor, career advisor or the SD38 Career Programs Office [display.board@sd38.bc.ca](mailto:display.board@sd38.bc.ca) at your school. Also check out (<http://careerprograms.sd38.bc.ca>). **DUE DATES** for all applications can be found on this website or through your counsellor.



Program and Application Due Dates (Approximate)	Overview of Program
<b>RCMP Youth Squad</b> <b>Application Due Date:</b> End of September (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> Spend 8 consecutive Thursday evenings at the Richmond RCMP Detachment learning about careers in policing and several other emergency services, including the Canadian Military, BC Ambulance Service, Richmond Fire/Rescue, Canadian Coast Guard and Canadian Border Services Agency. (Must attend all 8 evenings. Last night is a graduation ceremony for students and their parents.)</p> <p><b>Program Cost:</b> \$80.00 (includes snacks, t-shirt, hat and program graduation)</p> <p><b>Program Timeline:</b> 8 consecutive Thursdays (Mid-October thru Early December)</p> <p><b>Who Can Apply:</b> Students in Grades 10-12 (Preference given to those in grades 11/12)</p>
<b>RCMP Youth Academy</b> <b>Application Due Date:</b> End of November (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> For those interested in a career in policing or law enforcement, this is an intense 9-day (and night) career simulation opportunity that takes place at Camp Stillewood. Students participate in theory and practical sessions, through role-play and various team work activities, including drill practice. Run by RCMP staff, the Academy challenges students, both mentally and physically, giving them confidence and practical skills that will last a lifetime.</p> <p><b>Program Cost:</b> Approximately \$900.00 (includes accommodation, training and food for duration)</p> <p><b>Program Timeline:</b> 9 days late March/early April (overlaps with Easter weekend)</p> <p><b>Who Can Apply:</b> Students in Grades 11 or 12</p>
<b>Skilled Trades Exploration Program (STEP)</b> <b>Application Due Date:</b> Mid-end of May (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> In partnership with our SD38 maintenance and employees (CUPE 716), students have a brief introduction to working in the skilled trades. They select their trade preference (see choices on application), and work for one week in that area. In the fall, look for posters and listen for announcements at your school. <b>NEW: Must be taking a Tech Ed (A057) course.</b></p> <p><b>Program Cost:</b> Students purchase own steel-toed boots</p> <p><b>Program Timeline:</b> One week of work between April - early June</p> <p><b>Who Can Apply:</b> Students in Grades 11 or 12</p>
<b>Link38</b> (Learning in Kwantlen) <b>Application Due Date:</b> May 2019 (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> Gr. 11 students apply for this dual credit program directly through the SD38 Career Programs Office only (not KPU). Courses are taken at Kwantlen Polytechnic University (KPU) course at the Richmond Campus. Course taken <b>MUST</b> directly correspond to student's post-secondary career transition pathway. Application must also be supported by related grade 11/12 courses/activities available at applicant's school. <b>Link38 course offerings vary each year.</b> Course counts for post-secondary and for high school credit (4 credits).</p> <p><b>Program Cost:</b> Students purchase course books; SD38 covers tuition cost of course</p> <p><b>Program Timeline:</b> One night per week from September - December (usually 4-7pm). Day of week is dependent on course taken.</p> <p><b>Who Can Apply:</b> Students in Grades 11 who will be entering grade 12 in the next school year</p>
<b>Camp Ignite</b> <b>Application Due Date:</b> May Check for specific date at <a href="http://www.campignite.ca">www.campignite.ca</a>	<p><b>Description:</b> This 4-day camp is open to girls and provides them with an introduction to a career in firefighting. Firefighters will teach candidates about fitness, nutrition, health and teamwork as they relate to this career area. This program is sponsored by local fire departments and organizations.</p> <p><b>Program Cost:</b> Full cost is covered by local fire halls and sponsor organizations</p> <p><b>Program Timeline:</b> Usually second week in August (dates TBD)</p> <p><b>Who Can Apply:</b> Girls aged 16-18. Students apply directly through <a href="http://www.campignite.ca">www.campignite.ca</a></p>
<b>Roofing</b> <b>3-Day Training Program</b> (Through the Roofing Contractors Association of BC - RCABC) <b>Application Due Date:</b> End of May (See counsellor or Career Programs display board/website for specific date)	<p><b>Description:</b> This 3-day training program will prepare students for a job in the roofing industry. In three days, students get WorkSafeBC approved Fall Protection training, WHMIS certification, Ladder Safety training, Construction Site Safety training, and an introduction to the roofing industry. At the conclusion of the program, students will be registered as apprentices with the RCABC, and will be matched with an RCABC employee. Apprenticeship training will be offered. Find details on website: <a href="http://www.rcabc.org">www.rcabc.org</a></p> <p><b>Program Cost:</b> Approximately \$200 + cost of hard hat, steel toed boots and leather work gloves</p> <p><b>Program Timeline:</b> End of June or first week in July (dates TBD)</p> <p><b>Who Can Apply:</b> Submit application to SD38 Career Programs Office.</p>

### IV. Work Experience (WEX) 12A and 12B

- Students should check the availability of these **school-based courses** with their school counsellor. If offered, students taking these complete 100-120 hours (per course) of volunteer work in their focus area of interest.
- Upon successful completion, students earn 4 credits towards graduation for each of these Ministry of Education courses.



# APPLYING FOR YOUTH TRAIN IN TRADES PROGRAMS

(Priority given to earlier applicants who meet program eligibility requirements)

## PLUMBING

Day 2's (Sept. - June @ Palmer Secondary, including 4 weeks at Piping Industry College)

Through this ITA foundation program, students receive Level 1 technical training in this trade. Students will apply their knowledge by learning how to plan, design, install & service various types of piping systems. They also learn how to use industry specific tools and machinery. Students attend the PIA Piping Industry College for four weeks during the program.

Upon successful completion of this program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 11
- Physically able (tight spaces, moving heavy equipment)
- Successful result on district math assessment

### CREDITS AND CERTIFICATION EARNED

- Pass course work and ITA exam (blended) and earn Level 1 technical training certification (Certificate of Completion)
- Receive 16 credits (4 courses) at Grade 12 level



## PROFESSIONAL COOK 1

Day 2's (Sept. - June @ Richmond Secondary) + subsequent July @ VCC

This ITA foundation program offers students an opportunity to receive Level 1 technical training in this trade. Students perform all phases of kitchen activities including the preparation and presentation of vegetables, soups, sauces, meat, fish and poultry, cold kitchen items, desserts, baking, pastry, basic menu planning/cooking as well as knowledge of safety, sanitation and food storage, and customer relations. Students attend MANDATORY four weeks at VCC in July (includes ITA exam).

Upon successful completion of this program, students will achieve technical training credit for the first of three levels towards Red Seal certification.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 11
- Able to work in a fast-paced, multi-tasking environment
- Successful result on district math assessment
- FoodSafe Level 1 Certification (can complete in summer prior to program start) / Food's coursework an asset

### CREDITS AND CERTIFICATION EARNED

- Pass PC1 ITA exam, practical exam and course work to earn Level 1 technical training certification (Certificate of Qualification)
- Receive 16 credits (3 Cook courses + 1 MEX course) at Grade 12 level
- Any hours worked in the trade are registered with the ITA and go toward PC1 Level 1 completion



## AIRCRAFT MAINTENANCE ENGINEER – M

Full-time @ BCIT – Start date varies (see below)\*\*

ONLY CURRENT GRADE 11 OR 12 STUDENTS MAY APPLY FOR THIS PROGRAM.

An Aircraft Maintenance Engineer (AME) is responsible for the release (certification) of an aircraft after maintenance, inspection, repair or modification. This is an occupation requiring a high degree of responsibility and skill. Some of the skills learned include certifying airworthiness of aircraft, troubleshooting mechanical/electrical systems and adjusting and repairing systems according to strict specifications.

The program consists of 16 continuous months with short breaks between terms. SD38 covers tuition for the first term (4 months) ONLY and students are responsible for the tuition for terms 2, 3 and 4 (months 5-16).

### ENTRY REQUIREMENTS

- Any Math 11/12 (min 60%) AND a Language Arts 12
- Must have Physics 11 (SD38 requirement)
- Successful result - BCIT Mechanical Reasoning Trades pre-entry test
- Recommend Auto-Mechanics 11, any Tech Ed 11
- Good colour vision, and interest in mechanics
- Participation in Air Cadets a plus

### CREDITS AND CERTIFICATION EARNED

- Receive credit for Term 1 (of 4) toward AME certification and 16-20 secondary school Grade 12 credits
- NOTE: Once registered, student must commit to complete this 64 consecutive-week (16 months) program. AME license will be granted by Transport Canada when required work experience is achieved and applicant reaches age 21.
- \*\*Check with Career Programs Office for program start date (likely a fall start date)



## AUTO COLLISION REPAIR TECHNICIAN

Full-time Semester 2 @ VCC (Broadway) – January - August

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. The program uses modern equipment and techniques to train students in a wide range of skills appropriate to this industry. The VCC auto body shop is outfitted with computer-guided frame straighteners, laser measuring systems, and the latest welding equipment. More than 75 per cent of the program is spent working on the auto body shop floor. Projects are done in small teams that simulate the workplace.

Upon successful completion of this program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Relevant ADST (Tech Ed) course work
- Mechanical aptitude, interest and experience
- Successful result on district math assessment

### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 625 work-based hours
- Receive 24 credits (6 courses) at Grade 12 level
- Work experience practicum during program (students find own job)







## AUTO REFINISHING PREP TECHNICIAN

Full-time Semester 2 @ VCC (Broadway) - January - August

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. This involves working on the surfaces of motor vehicles, primarily in the preparation for restoring vehicle finishes once body work has been completed and prior to painting. Some of the duties include: removing layers of sub-coating; mixing undercoats; preparing metal surfaces for painting by spot filling, sanding, and masking; applying primers, and primer surfaces; and cleaning and polishing painted surfaces. More than 75 percent of the program is spent working on the auto body shop floor.

Upon successful completion of this foundation program, students will achieve credit for Level 1 Technical Training towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Any Math 11/12 AND a Language Arts 1/2
- Relevant ADST (Tech Ed) course work an asset
- Good manual dexterity, respiratory health and normal colour vision
- Good hand-eye coordination, eyesight, and line, form & depth perception
- Successful result on district math assessment

### Credits and Certification Earned

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 450 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level
- Work experience practicum during program (students find own job)

## BAKING AND PASTRY ARTS

\*Full-time Semester 1 @ VCC (Pender) - August - January

\*Must apply by first deadline (END OF FEBRUARY IS PREFERRED)

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Bakers prepare doughs, batters and other ingredients leading to the production of breads, cakes, pies, cookies and other baked goods. **Applicants must participate in a one week practical interview in the VCC kitchen in March.** Interviews are the first week in May with the VCC baking department. (Program starts in the summer between grades 11 and 12.)

Upon successful completion of this foundation program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Any Math 11/12 (minimum C-) AND a Language Arts 11 or 12
- FoodSafe Level 1 Certification + 1 week practical interview
- Successful result on math assessment + VCC instructor interview
- Strong attendance / punctuality record; can stand for long time
- Completion of ADST (foods) courses

### Credits and Certification Earned

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 900 work-based hours
- Receive 28 credits (7 courses) at Grade 12 level

## CARPENTRY (FRAMING AND FORMING)

Full-time Semester 2 @ BCIT (Burnaby) - February - July

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Carpenters construct, renovate and repair structures made of wood, steel, concrete and other materials. While conforming to plans, specifications and building codes, they may work on residential, civil, institutional, commercial and industrial projects. Training prepares students for entry-level employment in the carpentry trade. Basic theory and related information along with hands-on shop practice enable students to become competent in basic carpentry tasks.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Any Math 11/12 AND a Language Arts 1/2
- Must be able to work at heights and in adverse weather
- Relevant ADST (Tech Ed) course work an asset (e.g. woodwork)
- Successful results on math and reading assessments

### Credits and Certification Earned

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 450 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level

## CONSTRUCTION ELECTRICIAN

Full-time Semester 2 @ BCIT (Delta Satellite Campus) - February - July

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Construction Electricians plan, design, assemble, install, alter, repair, inspect, verify, commission, connect, operate, maintain and decommission electrical systems. Electrical systems provide heating, lighting, power, alarm, security, communication and control in residential, commercial, institutional, industrial, transportation, marine and entertainment environments.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



### Entry Requirements

- Language Arts 11/12 (min 67%) AND Physics 11 (min 67%)
- Any Math 11 (min 60%) + successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset (e.g. electrical)
- Should have good hearing, eyesight and hand-eye coordination

### Credits and Certification Earned

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 350 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level





## JOINER (CABINETMAKER)

Full-time Semester 1 or 2 @ BCIT (Burnaby)

This ITA foundation program leads to a Certificate of Completion for level 1 technical training in this trade. Joiners may work in a wide variety of specialties such as cabinetmaking, architectural woodwork (millwork), furniture making, boat interiors and store fixture manufacturing. They use manual and CAD layout or manual and CNC/CAM machines to assemble, install and finish articles that are fabricated with wood, plastic and/or other materials, and are intended to be used as architectural woodwork, millwork and furniture.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11 AND a Language Arts 12
- Proven mechanical aptitude, detail oriented and good physical shape
- Completion of ADST (Tech Ed) Woodwork course an asset
- Successful result on math and reading assessments

### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 475 work-based hours
- Receive 24 credits (6 courses) at Grade 12 level



## MASONRY (if offered by KPU)

Full-time Semester 2 @ KPU (Cloverdale) - February - June

Through this ITA foundation program, students learn to work with brick, concrete and glass block, terra cotta and stone. Masonry involves a lot of physical and outdoor work, using power and hand tools, and material moving equipment. Students will also learn to read blueprints, building codes, industry safety requirements and guidelines for handling hazardous materials. Practical skills are enhanced as they perform outdoor projects utilizing power and hand tools, moving material, constructing simple and ornate walls.

Upon successful completion of this program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 (min 67%) AND a Language Arts 12 (min 67%)
- Good overall health and physical strength for lifting
- Successful result on district math assessment
- Completion of ADST (Tech Ed) courses an asset

### CREDITS AND CERTIFICATION EARNED

- Pass ITA exams, practical exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 400 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level



## METAL FABRICATION

Full-time Semester 2 @ BCIT (Burnaby) - February - July

The Metal Fabrication (Fitter) foundation program, leads to a Certificate of Completion for Level 1 technical training in this trade.

Using ferrous and non-ferrous metals, fabricators deal with the selection, layout, shearing, cutting, punching, drilling, forming, fitting and welding of steel plates and structural steel shapes into products for the forest, mining, construction, transportation and agricultural industries. Typical projects that involve metal fabricators include bridges, buildings, hoppers, conveyors, towers, cranes, heavy mining equipment, logging equipment, and ship parts and equipment.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset
- Good hand-eye coordination and physical condition an asset

### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 450 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level



## MILLWRIGHT/INDUSTRIAL MECHANIC

Full-time Semester 2 @ KPU (Cloverdale) - February - July

Through this ITA foundation program, students are provided opportunities to apply the practical skills taught in hand, power and machine tool use, and perform various shop projects in stationary industrial machinery and mechanical equipment maintenance, troubleshooting, overhauling and installation. Students will be trained in the use of lathes, milling machines and grinders to make customized parts or repairs.

Upon successful completion of this program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.

### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Proven mechanical and mathematical aptitude
- Enjoys investigation, analysis and problem solving
- Successful result on district math assessment
- Completion of ADST (Tech Ed) Physics 11 course an asset

### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 425 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level







## ita | YOUTH TRAIN IN TRADES

### PAINTING AND DECORATING (COMMERCIAL)

6 weeks at FTI (Surrey) – Mid-June - July

This ITA Level 1 technical training program provides an overview of the painting industry. Students are introduced to common coatings, surface preparation techniques, and proper use of the tools and materials used in this trade, including airless spray. An extensive safety program includes respirator training, fall protection, ladder and scaffold training, elevated platform training and WHMIS.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of three levels towards Red Seal certification and can seek employment as apprentices.



#### ENTRY REQUIREMENTS

- Any Math 10/11 AND a Language Arts 12
- Good colour vision, and interest in mechanics
- Ability to stand for lengths of time and work at heights

#### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion)
- Receive 4 credits (1 course) at Grade 12 level

### MOTORCYCLE TECHNICIAN

Full-time Semester 2 @ BCIT (Burnaby) – January - July

This ITA foundation program provides students the theoretical knowledge and practical skills to enter the trade. It also provides the hands-on training to perform service operations such as new unit assembly and full service; repair of electrical components; and service of chassis, wheels, suspensions, drives, and accessories. Students diagnose, repair, adjust and replace engines, drive trains, suspension and electrical systems on small to medium sized power products.

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



#### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset
- Good hand/eye coordination and physical condition an asset

#### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam and course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 300 work-based hours
- Receive 16 credits (4 courses) at Grade 12 level

### SHEET METAL

Full-time Semester 1 @ BCIT (Burnaby) – September - January

This ITA foundation program leads to a Certificate of Completion for Level 1 technical training in this trade. Students are exposed to common welding processes and learn how to fabricate, assemble, alter and install sheet metal. Areas of work may include HVAC (Heating, Ventilating and Air Conditioning) ductwork, industrial and residential sheet metal work. Work is also found with hospital and kitchen equipment (stainless steel), industrial exhaust systems, industrial sheet metal work, and roofing and flashing (copper, aluminum, stainless steel and galvanized iron).

Upon successful completion of this foundation program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



#### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Successful results on math and reading assessments
- Relevant ADST (Tech Ed) course work an asset
- Good physical condition and able to work at heights

#### CREDITS AND CERTIFICATION EARNED

- Pass course work to earn Level 1 technical training certification (Certificate of Completion) + credit for 350 work-based hours
- Receive 20 credits (5 courses) at Grade 12 level

### WELDING

Full-time Semester 2 @ KPU (Cloverdale) – February - August

Through this ITA foundation program, students will learn skills and knowledge that prepare them for employment at the entry level. They develop skills to work safely and effectively using a variety of welding processes and procedures. This program prepares graduates for work with companies that manufacture structural steel and plate work, boilers, heavy machinery, and other ferrous and non-ferrous metal products.

Upon successful completion of this program, students will achieve technical training credit for the first of four levels towards Red Seal certification and can seek employment as apprentices.



#### ENTRY REQUIREMENTS

- Any Math 11/12 AND a Language Arts 12
- Mathematical aptitude, detail-oriented and good eye-hand coordination
- Successful result on math assessment + KPU instructor interview
- Completion of ADST (Tech Ed) courses an asset

#### CREDITS AND CERTIFICATION EARNED

- Pass ITA exam to earn Level 1 technical training certification (Certificate of Completion) + credit for work-based hours
- Receive 24 credits (6 courses) at Grade 12 level

## District Career Programs Office Team

- District Coordinator – Career Programs: **Terri Lockhart**
- District Facilitator – Career Programs: **David Henderson** (1/2 time)
- District Facilitator – Career Programs: **Peter Thackwray** (Day 2's)
- District Facilitator – Work in Trades: **Harrison Brown**
- Administrative Assistant – Career Programs: **Suzanne Mah**

### Questions for the team?

Email: [careerprograms@sd38.bc.ca](mailto:careerprograms@sd38.bc.ca)

**For specific dates and details of events and application/registration due dates, check the Career Programs website or call 604-668-6000 ext 3766.**

**Also, check the Career Programs information board in your school's counselling area.**

### RCMP Youth Squad

SD38 Gr. 10 – 12's apply to learn about emergency services  
Oct. – Dec. - 8 consecutive Thursdays 6:00-9:00pm

### RCMP Youth Academy

Career simulation open to current Gr. 11/12 students  
8 days/nights @ Camp Stillwood in Spring  
Apps due end of November

### STEP Skilled Trades Exploration Program

Gr. 11/12 students work 1 week alongside  
SD38 trades personnel in Spring  
Should have interest in trades as career option  
Apps due end of January

### Link38

Gr. 12's take KPU course and earn post-secondary  
credit while in high school  
Tuition is paid by SD38  
Apps due May

### Parents as Career Coaches

Evening for secondary school parents to learn how  
to be career coaches for their children  
Choose from one of two dates this year – check District PAC  
or Career Programs website to register

### Youth Train in Trades Program Site Visits/Workshops

See Youth Train in Trades programs in action  
Contact the Career Programs Office to arrange a tour  
Check our website for specific upcoming events

## SD38 Career Programs Office

c/o Cambie Secondary School, 4151 Jacombs Road,  
Richmond, BC V6V 1N7



**CAREER  
PROGRAMS**  
SCHOOL DISTRICT NO. 38 (RICHMOND)

 **RICHMOND**  
SCHOOL DISTRICT NO. 38

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IN TRADES

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WORK**  
IN TRADES



Ministry of  
Education





# CAREERPROGRAMS

SCHOOL DISTRICT NO. 38 (RICHMOND)

## A Future Without Limits



## SD38 CAREER PROGRAM OFFERINGS



[careerprograms.sd38.bc.ca](http://careerprograms.sd38.bc.ca)



@sd38careers



**RICHMOND**  
SCHOOL DISTRICT NO. 38





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**Website:** [hj cambie.sd38.bc.ca](http://hj cambie.sd38.bc.ca)

**Twitter:** @cambiecrusaders