



**Sparwood Secondary School
Course Planning Booklet**

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 Career Education and Work Experience

 English

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 Technology Education

Using This Booklet

This booklet is intended to provide students and parents/guardians information about the curriculum and programs at Sparwood Secondary School. Grade seven courses are pre-determined. The booklet gives descriptions of the courses students must take and electives students may select. It also gives suggestions to help with planning and course selection for the coming academic year.

How to Use This Booklet

Students and parents/guardians should:

1. Know and understand the program and courses offered for the specific grade level.
2. Know and understand the different programs and graduation requirements.
3. Read the course descriptions to determine and consider what background knowledge is beneficial.
4. Choose a program and course sequence suitable to the student's interests, abilities, and possible future vocation. **It is the student's responsibility to ensure that graduation requirements are met.**
5. A student or parent/guardian who is in doubt about any aspect of a program, graduation progress and tracking, or who has questions that are not answered in the booklet, should speak to a counselor (250-425-6666).

Pre-Planning Stage

To use this booklet effectively, the student should attempt to answer as fully as possible the following questions:

1. What courses must I take to fulfill my grade requirements?
2. Which electives best suit my interests, abilities, and future plans?
3. Do I have the proper requirements to take a certain course?
4. What are the entrance requirements of the university, college, trade school, or job that I plan on attending or starting after secondary school?

If you don't know the answer to one or more of the above questions, you might want to do some research before selecting courses.

REMEMBER:

- The final responsibility rests with the student and parents to ensure that proper programming occurs.
- The school timetable is developed from students' course selections. Please choose wisely.
- Please choose alternates for elective courses. Your first choice may not be possible in all cases.

Student Learning Plan for Graduation

Grade 10		Grade 11		Grade 12	
Course	Credits	Course	Credits	Course	Credits

Mandatory Grad Requirements

Subject	Possible Selections	Credits	Completed
English 10	Composition Literary Studies Creative Writing New Media Spoken Language	2 + 2	
English 11	Composition	4	
English Studies 12		4	
Social Studies 10		4	
Indigenous Studies 12		4	
Science 10		4	
Science 11	Life Science Chemistry Physics Earth Science	4	
Mathematics 10	Foundations and Pre-Calculus Workplace Math	4	
Mathematics 11/12	Pre-Calculus 11 Foundations of Mathematics 11 Workplace Math 11 Statistics 12	4	
Physical and Health Education 10		4	
Fine Arts/Applied Skills	Woodwork Visual Art Photography Media Design Food Studies Drama Automotives	4	
Career Life Education 10		4	
Career Life Connection/Capstone		4	
Numeracy Assessment 10			
Literacy Assessment 10			
Literacy Assessment 12			
Total of 52 credits required from above			

Student Learning Plan for Graduation (cont'd.)

Electives Needed for Grad

All courses taken outside the mandatory requirements listed on the previous page are electives. **Students are required to complete two electives at the Grade 12 level.**

Subject	Selections	Credits	Completed
Elective 12			
Elective 12			
Elective 12			
Elective			
Elective			
Elective			
Elective			
Total of 28 elective credits required			

Students are required to have 80 total credits to graduate.

Basic Graduation Plan

Listed below is a generic plan students could plan on taking to graduate. Blank lines are meant to show electives. Some courses require student choice.

Grade 8	Grade 9	Grade 10
ELA 8 Socials 8 Science 8 Math 8 Physical/Health Education 8 French 8 _____ _____ _____ Careers 8 (Outside of timetable)	ELA 9 Socials 9 Science 9 Math 9 Physical/Health Education 9 _____ _____ _____ Careers 9 (Outside of timetable)	English 10 (Selection required) Socials 10 Science 10 Math 10 (Selection required) Physical/Health Education 10 Career Life Education 10 _____ _____ _____
Grade 11	Grade 12	
English 11 (Selection required) Indigenous Studies 12 Science 11 (Selection required) Math 11/12 (Selection required) _____ _____ _____ _____	English 12 _____ _____ _____ _____ _____ _____ CLC/Capstone (Outside of timetable)	

Youth Work and Train in Trades

Youth Work in Trades

Youth Work in Trades allows students to register as an apprentice in a trade through the Industry Training Authority (ITA) and start the hands-on, work-based training component while still in secondary school. Employers in the trade area of interest provide paid work experience. Sixteen or more Grade 11 and 12 secondary school credits and 480 work-based training hours toward a trade are earned. The school does not connect students with employers but facilitates the coordination between the student, ITA, and secondary school.

Youth Train in Trades

Youth Train in Trades allows a student to start the technical training component of a trade while still in secondary school. The training may take place within a secondary school or college setting. Depending upon the trade and finding a suitable employer, a student may be able to register in a Youth Work in Trades program. Students enrolled in Youth Train in Trades earn secondary school and post-secondary credits at the same time.

Both Youth Work in Trades and Youth Train in Trades programs are supported by the Industry Training Authority (ITA), the agency responsible for trades in BC. To find out more about these programs see our school counsellor, Sharlene Charest.

Dual Credit Courses with College of the Rockies

Dual credit courses provide students with course choices that may not be available at our high school and can accelerate a student's career or post-secondary pathway. Dual credit courses give students high school credits, as well as post-secondary credits.

1. What college courses can a student take for dual credit?

Once students have met the prerequisites, they can take any post-secondary course that leads to a certificate, diploma, or degree as a dual credit course. College courses in Arts, Science, Kinesiology, Tourism and Recreation Management, Business, and Child, Youth, and Family Studies would qualify, as would trades programs such as Youth Train in Trades (formerly Accelerated Credit Enrollment in Industry Training/ACEIT).

2. Does the college provide dual credit awards?

Yes, the College offers 35 course tuition awards to encourage enrollment in academic courses.

3. How many credits does the high school award?

The high school awards 4 credits for a typical 3 credit college course.

4. Do the College and high school agree on who takes dual credit courses?

When the student seeks a course at the College, the College gives the student a permission form to be signed by the school principal allowing the student to take the dual credit course.

5. Are dual credit courses taught in high schools?

The College can deliver the course either at a high school or at the College with a qualified instructor. Dual credit courses may also be available online.

6. Where can I get more information about taking a dual credit course?

Brian Conrad, Regional Transitions Coordinator – conrad@cotr.bc.ca

College of the Rockies Education Advisors – studentservices@cotr.bc.ca

Sharlene Charest (SSS School Counsellor) – sharlene.charest@sd5.bc.ca

Student Support Services

Student Support Services at Sparwood Secondary School help students realize their potential in school. These services include the Life Skills Program, the Resource Room, the Learning Assistance Room which supports students with their academic, social, and emotional stretches, and the Alternate Education Program (STRIVE). A student's placement in these programs is the result of careful consideration of the student's needs by the School Based Team (SBT). The SBT reviews teacher recommendations, academic records, and psycho-educational assessments. In no case will a student be permanently placed in any of these programs without the approval of the student's parents.

STRIVE

The STRIVE alternate program is designed to meet the individual needs of students outside of the regular classroom. We are here to help students accomplish their educational goals along with facilitating an environment that allows for social and emotional growth.

STRIVE has a part-time Youth Care Worker who provides social and emotional support to the students. Helping youth develop healthy life skills is important to us. Throughout the year, we run team-building activities, educational and therapeutic groups, and have numerous community agencies deliver presentations.

Learning Assistance

This course is designed to provide students an opportunity to strengthen their learning strategies for use in classroom settings or for independent learning. In addition, the block may be used to teach skill development or remediation as needed. This course is NOT intended to be used as a "homework" block but rather as a supportive environment to help students increase their capacity and self-determination. Students enrolled will participate in activities that will help increase their classroom, peer, school, and community connections. Possible activities may include goal setting, memory strategies, multiple intelligences, field trips, volunteering, work experience, passion projects, life skills, and more.

Summary of Courses

Applied Skills

Automotive Technology 11/12
Food Studies 10/11/12
Media Design 10/11/12
Power Technology 10
Woodwork 10/11/12

BAA Courses

Leadership 10/11/12
Tutoring 11/12

Career Education/ Work Experience

Career Life Education 10
Career Life Connections/
Capstone
Work Experience 12A/12B

English

Composition 10
Creative Writing 10
Literary Studies 10
New Media 10
Spoken Language 10
Composition 11
English Studies 12

Fine Arts

Drama 10
Theatre Production 11/12
Photography 10/11/12
Art Studio 10/11/12

French

French 10/11/12

Mathematics

Foundations and Pre-Calculus 10
Workplace Math 10
Foundations 11
Pre-Calculus 11
Workplace Math 11
Calculus 12
Foundations 12
Pre-Calculus 12
Statistics 12

Physical/Health Education

Physical and Health Education 10
Active Living 11/12
Fitness and Conditioning 10/11/12
Outdoor Education 10/11/12

Science

Science 10
Chemistry 11
Earth Science 11
Life Science 11
Physics 11
Anatomy and Physiology 12
Chemistry 12
Physics 12

Social Studies

Social Studies 10
Genocide Studies 12
Indigenous Studies 12
Law 12
Social Justice 12

Course Descriptions by Department

Applied Skills

Automotives

Power Technology 10 – 4 credit elective

Power Technologies 10 is an introductory course to the internal combustion engine. Students will learn the fundamentals of small engine operation, diagnostics, and repair and may work on single-cylinder engines. Power Technologies 10 covers four-stroke and two-stroke engine theory and is the foundation for Automotive Technologies 11 and 12.

Automotive Technology 11/12 – 4 credit elective (each section can be taken once for a total of 8 credits)

The goal of this course is to provide students with a solid understanding of the systems in a vehicle. After taking the course, each student should be capable of effectively maintaining their car and completing basic repairs. These skills will potentially save students thousands of dollars over their lifetime. The course is a mix of practical and theoretical work. It is not necessary to own or provide a vehicle to participate in this course.

Food Studies

Food Studies 10 – 4 credit elective

Students in this class will work towards understanding the preparation of balanced meals. Each student will learn about nutrients, functions of food in the body, an individual's food needs, and how to balance good eating habits. The students will apply basic preparation skills in practical projects. The course consists of practical and written work. Practical classes will cover basic flour mixtures (pancakes, muffins, cookies), potato creations (hashbrowns, gnocchi, perogies), pasta creations (homemade pasta, ravioli), and more. Written work in this course includes food and kitchen safety, nutrition, and more.

Food Studies 11 – 4 credit elective

The Food Studies 11 program is designed to expand basic cooking principles and techniques and develop a deeper understanding of human nutrition. Basic principles of meal planning, budgeting, consumerism, and kitchen and time management are studied. Students are expected to follow a recipe accurately, work cooperatively in a group, and evaluate prepared products according to established standards. This course includes both written and practical work. Practical classes will cover potato and pasta creations, appetizers (spring rolls, gyoza), and full meals (ex. teriyaki chicken stir fry). Written work will cover food and kitchen safety, nutrition, body processes in digestion, and food security.

Food Studies 12 – 4 credit elective

The Food Studies 12 program involves advanced cooking principles, methods, and techniques. This course includes both group and individual projects, as well as an in-depth study of human nutrition. This course includes both written and practical work. Practical classes cover potato and pasta creations, appetizers, full meals, and international foods (ex. curries, sushi, etc.). Written work will cover food and kitchen safety, nutrition, body processes in digestion, food security, and food production and supply.

Media Design

Media Design 10/11/12 – 4 credit elective (Media Design can be taken up to 3 times for a total of 12 credits)

Media Design helps students make connections between the message they want to convey, how to create the media to convey the message, and how people will perceive the message. Students will learn to use media creation tools (Photoshop, Illustrator, After Effects, Premiere Pro, Canva, online audio sources, AI generated media, Vcarve), learning to find and create the necessary raw media resources (photos, filming, drawing, internet sources), and to develop critical skills of personal work and the work of others.

Woodwork

Woodwork 10 – 4 credit elective

Students enrolled in this course will have the opportunity to safely operate basic woodworking machinery. Students will construct common projects and individual projects. A design problem will be solved and constructed. Students are expected to draw all projects. Students will pay for individual projects only. Woodwork students at SSS will use rough-cut lumber from our sawmill. Students will prepare rough stock for milling and machining safely.

Woodwork 11 – 4 credit elective

The aim of this course is to develop skills, knowledge, and confidence in woodworking tools, machinery, and cabinet construction. Students will also be expected to illustrate how their manufactured project is beneficial. This course will consist of a common core project and design problem project, as well as supplementary projects. Students will be responsible for knowledge of the theoretical components of house construction. Students are expected to pay for all supplementary project materials. Grade 11 students will use the sawmill to mill lumber from logs. Students will identify several sawing techniques including rift sawing, plain sawing, and quarter sawing.

Woodwork 12 – 4 credit elective

Students will be expected to follow advanced machine and power tool procedures. Cabinet construction theory will be an integral part of this course. Students will be expected to draft all projects prior to construction. Students will also be expected to apply many types of wood finishes. Students will be responsible for knowledge of the theoretical components of house construction. The course will also consist of common projects, design problem-solving projects, and supplementary projects. Students are expected to pay for all supplementary project materials. Grade 12 students will use the sawmill to mill lumber from logs. Students will identify several sawing techniques including rift sawing, plain sawing, and quarter sawing.

Board Authority Authorized Courses: BAA Courses

Leadership

Leadership 10/11/12 – 4 credit elective (this course is usually offered outside of the timetable)

This course is designed to provide students with the opportunity to master the traits, skills, and responsibilities cultivated through leadership. Students will use those traits, skills, and responsibilities to serve their school and the extended community, as well as to lead others in the spirit of service.

Tutoring

Tutoring 11/12 – 4 credit elective

This is a participatory course that prepares and motivates students to provide assistance to a teacher in their schools and communities. Students will work under the supervision of a teacher or mentor to provide assistance to a teacher in a variety of teacher activities. Students will develop skills in organization, self-directedness, communication, interpersonal relationships, leadership, teamwork, and in confidentiality. Students will apply these skills daily in activities related to supporting a teacher.

Career Education and Work Experience

Career Life Education 10 – Required 4 credit course

This course helps students develop the confidence and skills they need to become self-directed individuals, who display initiative, set priorities, establish goals, make thoughtful decisions, and take responsibility for pursuing their goals in an ever-changing society. Career Life Education will focus on personal development, connections to the community, and developing a career life plan that will transition into the Career Life Connections and Capstone upon graduation. Career Life Education 10 also encourages students to explore a full range of career and education choices, to think about their prospects for success in those careers, and to plan the actions required to pursue their chosen career paths and post-secondary education destinations.

Career Life Connections and Capstone – Required 4 credit course

This course is a continuation of the Career Life Education course and will focus on personal development, connections to the community, and a career life plan. Career Life Connections has a final capstone project presented to a panel showcasing student learning, achievement, and responsibility. Student capstone projects must represent each core competency and the sub-competencies within those categories.

Work Experience 12A/12B – 4 credit electives (each section can be taken once for a total of 8 credits)

Work experience is a type of Career Education program where students gain experience in the career field of their choice through a combination of coursework and work experience. The program is scheduled in a manner that allows for creative use of the timetable to provide classroom time as needed and to allow students to be at their work placement during school time. Work Experience 12 provides students with an opportunity to get work experience in the community.

English

English 10 – Students must take two 2-credit courses of English 10.

Composition 10 – Required 2 credit course; offered with each section of English 10 at SSS

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 collaborate 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.

Choice of **Creative Writing 10** or **New Media 10** paired with Composition 10

Creative Writing 10 – 2 credit course

In Creative Writing, students explore relationships between self and world, as well as personal identities and identities of others, through the study and creation of short fiction, poems, and memoirs (among other genres). Using existing texts and compositions (including short films, murals, images, and music) as model pieces, students will practice using creative expression to respond to texts, convey themes, present characters, and develop conflict.

Literary Studies 10 – 2 credit course

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 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, increase their literacy skills, expand their development as global citizens, develop and broaden their understanding of themselves and the world, and develop higher-level thinking and learning skills.

New Media 10 – 2 credit course

New Media 10 is an exploration of New Media in a multitude of forms. Throughout this course, students will investigate the development and drastic change of media as a form of art, communication, and social vehicle that has become essential in our modern lives. Through journalism, comics and graphic novels, and film, students will explore the constructs of media while developing the tools for creating and analyzing its influence on our everyday lives. Throughout New Media 10, we will craft skills in analysis, broadening perspectives, and collaboration for a purposeful understanding of the power media holds on our concept of person.

Spoken Word 10 – 2 credit course

Spoken Language 10 is designed to support students in their development of spoken communication through processes of questioning, exploring, and sampling. The course builds students' spoken language competencies by introducing them to varied structures, forms, and styles of oral compositions and by providing opportunities for students to individually and collaboratively study, draft, and use language to create original pieces in a variety of modes. This area of choice will also provide students with opportunities for performance, storytelling, and public speaking.

English 11 – Students must take one 4-credit course of English 11.

Composition 11 – 4 credit course

Composition 11 is designed for students who have an interest in developing and refining 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 collaborate 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.

English 12 – Students must take one 4-credit course of English 12.

English Studies 12 – Required 4 credit course

English 12 builds upon and extends students' learning experiences from English 10 and 11. This course provides students with opportunities to refine their communication skills in a variety of contexts and to consider how these skills might apply both personally and professionally. Students will think critically and creatively about language and text, aware and reflective of diverse representations and perspectives. Students will deepen their understanding of themselves and others in a changing world, gain insight into the factors that shape identity, and appreciate the importance of self-representation through text. Finally, this course will deepen students' understanding of the knowledge and perspectives of First Peoples, while expanding the understanding of what it means to be an educated Canadian and global citizen.

Fine Arts

Drama and Theatre Production

Drama 10 – 4 credit elective (this course is sometimes only offered out of timetable)

Drama and Theatre exist at Sparwood Secondary School to create a tradition of theatrical excellence. No prior experience is required. Setting your sights on excellence is. This course aims to develop students' basic speaking and acting skills. Students will lose many inhibitions and react without shyness or self-consciousness in new surroundings when working in activity situations. This will require performing on stage in some fashion with the support of the cast, crew, and director. Students taking this course should wish to improve their speaking and communication skills and be willing to grow as they step outside their comfort zone. The risk is great. So is the reward.

Theatre Production 11 – 4 credit elective (this course is sometimes only offered out of timetable)

Drama and Theatre exist at Sparwood Secondary School to create a tradition of theatrical excellence. No prior experience is required. Setting your sights on excellence is. Students will perform for diverse audiences and in different venues to learn about character development, stage etiquette, movement, dramatic elements, and more. They will learn the many elements required to put together a successful production. This course requires students to perform on stage with the encouragement and support of the director and other cast members.

Theatre Production 12 – 4 credit elective (this course is sometimes only offered out of timetable)

Drama and Theatre exist at Sparwood Secondary School to create a tradition of theatrical excellence. No prior experience is required. Setting your sights on excellence is. Students will collaborate with their classmates to create, write, produce, direct, and perform dramatic works of their own making. Students should use their interests inside and outside of school to influence and inspire their creative processes. Students who are keen to perform will have just as large a role as those who do not. This course will encourage students to create and show work that they are passionate about.

Photography

Photography 10/11/12 – 4 credit elective (each section can be taken once for a total of 12 credits)

Have you wondered how professional photographers manage to capture that perfect image? Gain a better understanding of photography by exploring camera functions and the elements of composition while putting theory into practice by taking your own spectacular shots. Learn how to display your work for exhibitions and develop skills important for a career as a photographer. Develop your own artistic style through weekly photo challenges, 6 basic photoshop projects, and 2 culminating term projects. Students may need to leave school property on a regular basis and need to be prepared to walk short distances and move through nature to get that perfect shot.

Visual Arts

Art Studio 10 – 4 credit elective

In Art Studio 10 art concepts learned in Grades 7-9 are readdressed. A strong emphasis on creating 3-dimensional images on paper and/or canvas will be addressed. The elements of art and principles of design will be reinforced, and the concepts involved in creating a strong composition will be reviewed. Art history will play an important role in this course.

Art Studio 11/12 – 4 credit elective (each course may be taken once for a total of 8 credits)

The mandate for both Art Studio 11 and Art Studio 12 are very similar, but the level of exploration will increase as the grade increases. Art history will play an important role in this course. These comprehensive courses are designed to facilitate a broad range of experiences in 2-dimensional and 3-dimensional pieces. A strong focus on the elements and principles of art and design relating to composition will be addressed. Art Studio 11 and Art Studio 12 provide an excellent opportunity to start creating portfolio-quality pieces that would be suitable to use when applying for post-secondary studies in fine arts.

French

French 10 – 4 credit elective

This course expands the aims and objectives of the French 8 and 9 courses. Students entering French 10 should know how to ask and answer simple questions in full sentences. Students should also have a command of common verbs (regular and irregular) in the present and future tenses. French 10 places an emphasis on practical communication skills, both oral and written. Students will learn to use a range of common vocabulary and expressions and will be expected to relay information in past, present, and future tense, both orally and in written form.

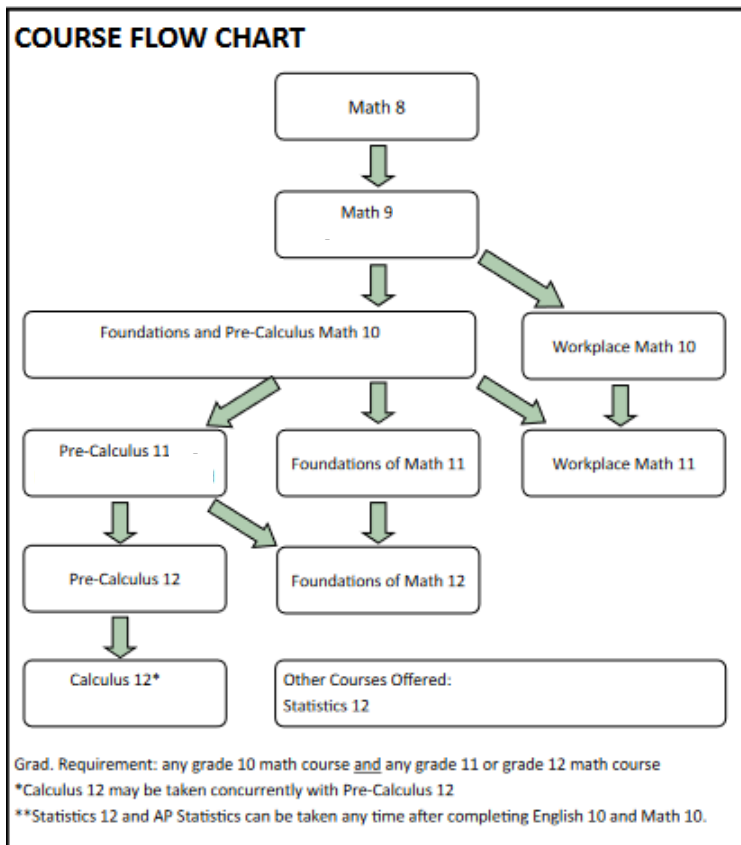
French 11 – 4 credit elective

Structures and tasks in this course are much more sophisticated than those covered in French 10. French is the language of communication in the classroom, and it is expected that students demonstrate their ability to understand spoken French and communicate in French at a level consistent with the structures being presented. This course will include a variety of supplementary materials to help improve all skill areas.

French 12 – 4 credit elective

French 12 completes the sequence of French courses offered at SSS. Emphasis is placed on expanding oral and written comprehension, as well as refining oral and written communication skills. French is the language of communication in the classroom.

Mathematics



PATHWAYS IN MATH 10 - 12

Courses in grades 10 - 12 are organized into 3 pathways. Each is designed to provide prerequisite attitudes, knowledge, and skills for specific post-secondary programs or for direct entry into the work force. When choosing a pathway, students need to consider their math ability, course load, interests, and future plans.

To graduate, students must complete a grade 10 mathematics course, as well as a math course at the grade 11 or 12 level.

Example future plans for each pathway:

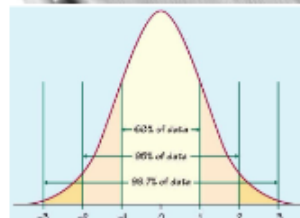
WORKPLACE MATH:

- Technical school
- Most trade school programs
- Direct entry into the workforce



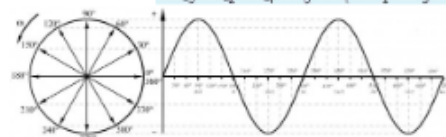
FOUNDATIONS MATH:

- Social sciences
- Humanities
- Fine arts
- Communication & Technology



PRE-CALCULUS:

- Sciences
- Math
- Applied Sciences (e.g. Engineering)
- Quantitative Commerce Programs (e.g. SFU, UBC)



***If you are interested in a specific program, please check the entrance requirements BEFORE making a pathway choice.**

Math 10 – one 4-credit course required

Foundations of Mathematics and Pre-Calculus 10 – 4 credit course

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in both the arts and sciences. Topics include applying trigonometric ratios to right triangles, operations with polynomial expressions and powers, functions and relations, systems of linear equations, arithmetic sequences, and financial literacy. Upon completion of this course, students are prepared to take Workplace Mathematics 11, Foundations of Mathematics 11, or Pre-Calculus 11.

Workplace Math 10 – 4 credit course

This pathway is designed to prepare students for entry into many of the trades, some fine arts programs, and for direct entry into the workforce. Topics include the metric and imperial systems, measurement, geometry, trigonometry, and the fundamentals of income. At the end of this course, students are prepared to take Workplace Mathematics 11.

Math 11 – One of the following 4-credit courses is required to graduate; others may be taken as electives

Workplace Math 11 – 4 credit course

This pathway is designed to prepare students for entry into many of the trades, some fine arts programs, and for direct entry into the workforce. Topics include measurement, geometry, data analysis, probability and statistics, formulae, and budgeting. At the end of this course, students have completed their high school graduation requirement for mathematics.

Workplace Math 11
<ul style="list-style-type: none">• Direct entry into work force• Accounting, Finance, and Insurance (BCIT)• Broadcast and Media Communications (BCIT)• Digital Arts and Web Development (BCIT)• Business Administration (BCIT)• Marketing, Sales, Tourism (BCIT)• Interior Design (BCIT)• Many trade programs at BCIT including: carpentry, joinery, metal fabricator, plumbing, welding, machinist, millwright, automotive technician, aircraft technician, etc.

Foundations of Math 11 or 12
<ul style="list-style-type: none">• Communication (SFU, UBC)• Contemporary Arts or Fine Arts (SFU, UBC)• Bachelor of Environmental Studies (SFU)• Health Science Bachelor of Arts (SFU)• Faculty of Arts (UBC)• Dental Hygiene (UBC)• Education (SFU, UBC)• Wood Products Processing (UBC)• Applied and Natural Sciences (BCIT)• Some Health Sciences at BCIT including nursing

Foundations of Mathematics 11 – 4 credit course

This course is designed to provide students with mathematical understandings and critical thinking skills identified for post-secondary studies in the arts or the humanities. Topics include logic and reasoning, functions, geometry, and statistics. Although the course explores many abstract concepts including algebra, it will not prepare you for university calculus. Students who successfully master the learning outcomes of this course may continue to Foundations of Mathematics 12.

Pre-Calculus 11 – 4 credit course

This course is designed to develop students' mathematical understandings and competencies identified for entry into post-secondary programs that require the study of theoretical calculus. Curricular content includes radicals, polynomials, quadratic functions, and trigonometry. This course is meant for students who were strong in Foundations and Pre-Calculus Math 10, as this course can be academically challenging.

Math 12 – these courses are electives

Foundations of Mathematics 12 – 4 credit elective

The practical focus of the Foundations of Mathematics 12 pathway is designed to enable students to develop their mathematical knowledge, skills, and attitudes in the context of their lives and possible careers. There is increased emphasis on concrete activities and modeling, and decreased emphasis on symbol manipulation (algebra). It makes sense to take either Foundations of Mathematics 11 or Pre-Calculus 11 before taking this course.

Pre-Calculus 12 – 4 credit elective

This is an academic Mathematics course required for entrance into many university-level programs and prepares students for the study of Calculus. Students will build on concepts learned in Pre-Calculus 11 by deepening their knowledge of algebra and graphing. Topics include transformations, logarithms, exponential functions and equations, trigonometry, geometric sequences and series, polynomial functions, and rational functions.

Pre-Calculus 12
<ul style="list-style-type: none">• Computing Science (SFU, UBC)• Engineering Science (SFU, UBC, BCIT)• Business/Commerce school (SFU, UBC)• School of Interactive Arts and Technology (SFU)• Faculty of Science (SFU, UBC)• Food, Nutrition, and Health (UBC)• Forestry (UBC)• Computer Information or Systems Technology (BCIT)• Some Health Sciences at BCIT including Medical Lab. Science• Electrical Trade – only need PC 11 (BCIT)

Calculus 12 – 4 credit elective

This course develops students' mathematical understandings and competencies as a preview to post-secondary calculus. Curricular content includes limits, derivatives, and integration. Curricular Competencies (reasoning, problem-solving, communication, connecting, and reflecting) are experienced through the content of this course. It is recommended that students take Pre-Calculus 11 and/or 12 before this course. Students should take this course as soon as they can, as it is only offered once every two years due to the size of our school. If students take Calculus before Pre-Calculus 12, they should still take Pre-Calculus 12 to ensure they have an in-depth understanding of trigonometry.

Statistics 12 – 4 credit elective

In Statistics, we learn to examine raw data, graphs, charts, rates, percentages, probabilities, averages, forecasts, and trend lines to see if a true experiment was conducted. Students should complete Foundations of Mathematics and Pre-Calculus 10 before taking this course.

Physical and Health Education

Physical and Health Education 10 – Required 4 credit course

Students will work to refine proper techniques for movement skills, concepts, and strategies through a variety of traditional and non-traditional sports and activities. Sports and activities will be explored in a variety of environments, such as the gymnasium, fitness room, and outdoors. Students will work on individualized fitness programs to meet their goals throughout the course. FITT and SAID principles will be taught and utilized throughout the fitness unit. Students will discuss a variety of health topics that promote healthy, active living, social and community awareness, and mental well-being. First aid skills for responding to emergencies will also be taught.

Active Living 11/12 – 4 credit electives (each course can be taken once for a total of 8 credits)

This course is primarily located in our gymnasium and field facilities with access to the community's resources. The course emphasizes safety, fair play, and leadership in a variety of physical activities. Proper techniques to prevent injury are emphasized, as students learn to develop and demonstrate skills needed to plan, organize, and safely participate in recreational events and other preferred physical activities. Proper fundamental movement patterns will be taught, including non-locomotor (balancing, bending, lifting), locomotor (running, skipping, rolling), and manipulative (striking, bouncing, kicking, passing) skills. This course will emphasize leadership, volunteering, and mentoring others. Injury prevention and management will be reinforced throughout the course, providing students with the knowledge and tools to follow personal safety practices and to apply rules and guidelines for participating safely in specific activities. Additionally, this course will explore the recreational resources available in the community.

Fitness and Conditioning 11/12 – 4 credit electives (each course can be taken once for a total of 8 credits)

This course provides students with opportunities to learn how personal fitness can be maintained or enhanced through participation in a variety of activities at different intensity levels. Students will learn how the body moves and functions to stay safe, follow proper training guidelines, and make healthy choices that can help them reach their health and fitness goals. Throughout this course, students will work towards competencies to lead a healthy lifestyle. Some of these competencies include lifelong participation in a range of physical activities, building positive self-identification and mental well-being, and making informed decisions that support personal and community health and safety. This course will include theory and exercise. Students will exercise indoors and outdoors through weightlifting, circuit training, running, and other cardiovascular activities.

Outdoor Education 10/11/12 – 4 credit elective (each course may be taken once for a total of 12 credits; this course is sometimes only offered outside of the timetable)

This course focuses on preparing for, and participating in, outdoor activities. Students learn a variety of skills for outdoor activities, such as emergency preparation, nutrition and hydration, and activity planning. Students will also explore the roles of cultural sensitivities and environmental stewardship in outdoor recreation. While the focus is clearly on outdoor activities, the curriculum allows for a wide range of indoor and outdoor physical activities to prepare students for specific activities.

Science

Science 10 – Required 4 credit course

Students will investigate genetic diversity and patterns of inheritance, chemical processes, energy transformations, and the formation of the universe. The big ideas from the science curriculum would include:

- DNA is the basis for the diversity of living things.
- Energy change is required as atoms rearrange in chemical processes.
- Energy is conserved, and its transformation can affect living things and the environment.
- The formation of the universe can be explained by the big bang theory.

Science 11 – One of the following 4 credit courses is required to graduate

Chemistry 11 – 4 credit course

Students are expected to have proficient math skills (unit conversion and algebra), know how to operate a scientific calculator (exponents, order of operations, scientific notation), and solve word problems systematically. This course is a survey course introducing the branches of chemistry that include physical, inorganic, and organic concepts. Students will learn about what matter is composed of and the characteristics and behaviour of matter at the molecular and atomic level. A focus will be on students learning measurement and lab techniques and performing quantitative calculations.

Earth Science 11 – 4 credit course

Earth Science 11 explores planet Earth's structures, processes occurring upon and within it, and the space surrounding it. Geologic topics in this course include the formation of rocks and minerals, plate tectonics, mountain building, volcanism, earthquakes, weathering and erosion, and the geologic time scale. Climate, ocean, and weather systems, as well as the Solar system, stars, and galaxies are also explored.

Life Sciences 11 – 4 credit course

Students are expected to read and process information from a variety of texts that provide opportunities for students to question, predict, plan, conduct, process, and analyze data. The key concepts covered in this course examine the interactions required for life at molecular and cellular levels, evolution, and the characteristics used to classify organisms. Students will examine trends in complexity among various life forms as well as the relationships between organisms using an ecological, evolutionary, and Indigenous lens.

Physics 11 – 4 credit course

Physics is a fundamental science that strives to describe the most basic elements of nature. Through inquiry and problem-solving, students survey major themes of Physics such as kinematics (how things move), dynamics (why things move), energy (kinetic, potential, and thermal), circuits (building and analyzing), and waves (sound and light). Throughout this course, there is a focus on data collection and analysis through lab work.

Science 12 – these courses are electives

Anatomy and Physiology 12 – 4 credit elective

Students must be able to read and process information from a variety of texts that provide opportunities for students to question, predict, plan, conduct, process, and analyze data. This course examines how homeostasis (balance) is maintained through physiological processes, the interaction between genes and the environment, and the interrelationships between organ systems. The course also focuses on understanding the chemistry that organizes atoms and molecules that make up biological systems.

Chemistry 12 – 4 credit elective

Students are expected to have good math skills, have completed Chemistry 11 at a highly competent level, apply significant figures, the mole concept, and molarity in calculations, as well as have good study habits, spend more time practicing problems, make connections between topics, and apply knowledge to new situations. This course is an in-depth study of equilibrium systems (reversible reactions). Students will learn about the characteristics of equilibrium and the factors that affect reactions. They will also apply their understanding to reaction rates, solubility, acids and bases, and electrochemistry. This course involves a higher level of application and critical thinking than Chemistry 11.

Physics 12 – 4 credit elective

Physics 12 builds on the concepts and skills developed in Physics 11 with an emphasis on momentum, circular motion, non-contact forces, electrostatics, and electromagnetism. Capitalizing on the growing sophistication of students' experimental skills, lab work will focus on experimental design, data collection, and analysis. Physics 12 is a challenging course meant to prepare students for post-secondary sciences.

Social Studies

Social Studies 10 – Required 4 credit course

Students in Social Studies 10 focus on Canada in the 20th century, including economic and political ideologies and institutions that shaped the century. Students will develop an understanding of Canadian identities, Canada's steps towards autonomy, and the structure and function of the Canadian government. Students will examine, in-depth, international and domestic conflict and cooperation in the 20th century. Instances of oppression, historical wrongs, and injustices at home and abroad are also addressed. The curriculum emphasizes the knowledge, skills, and competencies to be active, informed citizens who can think critically, understand and explain the perspectives of others, make judgments, and communicate ideas effectively.

Social Studies 12 – these 4 credit courses are electives; however, one Indigenous-focused course is required to graduate (Indigenous Studies 12); by completing Indigenous Studies 12, students will satisfy both the Social Studies 11/12 AND Indigenous-focused course requirements necessary for graduation

Genocide Studies 12 – 4 credit elective

The following big ideas are studied in Genocide Studies 12:

- the intentional destruction of people and their cultures is not inevitable, and such attempts can be disrupted and resisted.
- the use of the term “genocide” to describe atrocities has political, legal, social, and cultural ramifications
- despite international commitments to prohibit genocide, violence targeted against groups of people has continued to challenge global peace and prosperity
- while genocides are caused by and carried out for different reasons, all genocides share similarities in progression and scope

Indigenous Studies 12 – Required 4 credit course

Indigenous Studies 12 looks at how Indigenous peoples' identities, worldviews, and language are renewed, sustained, and transformed through their connection to the land. Students will investigate how the impact of contact and colonialism continues to affect the political, social, and economic lives of Indigenous peoples. Students will study how cultural expressions convey the richness, diversity, and resiliency of Indigenous peoples. Students will gain an understanding of how, through self-governance, leadership, and self-determination, Indigenous peoples challenge and resist ongoing colonialism.

Law 12 – 4 credit elective

Law 12 introduces students to the legal rights and responsibilities that allow citizens to participate in society. Law 12 focuses on having students understand Canadian law, student rights within the law, and will culminate with a student mock trial in which students get to engage with Canadian law and demonstrate their understanding.

Social Justice 12 – 4 credit elective

The aim of Social Justice 12 is to raise students' awareness of social injustices, to enable them to analyze situations from a social justice perspective, and to provide them with knowledge, skills, and an ethical framework to advocate for a socially just world. A progressive, democratic country values diversity and inclusion. It also fosters caring and fair communities. Social Justice 12 promotes the pursuit of social justice as an important responsibility for all and encourages students to develop the commitment and ability to work toward a more just society.