

Pemberton Secondary School

Course Selection Book 2016/17



Artwork by Ren Zabloutney

PRINCIPAL'S MESSAGE

Welcome to Pemberton Secondary and one of the most notable times of the year – course selection. Decisions regarding course options will be used to assist you in achieving your goals and setting your future direction. These decisions will be made over the next few weeks and it is essential for parents, guardians and students to carefully consider their options. This is the time for students to assess personal interests and strengths and develop both long and short-term goals for their future.

This booklet is designed to help students in the planning process. It contains course descriptions, graduation and post-secondary prerequisites and general program information. Please take time to read this information carefully and contact us if you require further information on grade and program requirements.

In order to maximize student opportunities and ensure transition goals are met, **students must take a full complement of courses** (eight courses for Grade 10 and 11, and eight courses in addition to the grad transitions in their grade 12 year). There are a number of course options available to students, particularly at the senior grades. Some courses prepare students for college and university entrance, others for vocational and fine arts training, and still others prepare students for the workplace. Careful planning and informed decision making will help to ensure students' success and direction.

Krista Brynolfson
Principal

COUNSELOR'S MESSAGE

The counselor's role is to assist you in academic planning, career and vocational decision making and exploring interests and goals. The counselor is also available to discuss a broad range of personal concerns.

Course offerings (for elective courses) are based on the selections made by students. Courses will be offered on the basis of sufficient enrolment.

We encourage you to seek assistance when selecting courses in order to determine how these courses relate to your future goals. You are encouraged to be involved in students' course planning, and we welcome any questions or concerns about courses and career planning.

Please take time to explore your choices and don't hesitate to access our resource center or discuss your plans with our counselors. It is our desire to assist our students in achieving their personal and educational goals. We look forward to working together with students and parents to develop happy and contributing members of the community.
All the best in your course selections and future direction.

Heather Quamme
Counselor

What You Need to Graduate

The Graduation Requirements Grades 10 – 12

Minimum 80 credits (equivalent to 20 courses each four -credits) required for graduation.

48 Required Credits include:	
Language Arts 10 (English <u>or</u> English First People's 10)	4 credits
Language Arts 11 (English 11, English First People's 11 <u>or</u> Communications 11)	4 credits
Language Arts 12 (English 12, English First People's 12 <u>or</u> Communications 12)	4 credits
Social Studies 10	4 credits
Social Studies 11, Canadian Civics 11 <u>or</u> BC First Nations Studies 12	4 credits
Science 10	4 credits
A Science 11 <u>or</u> 12 (Biology/Chemistry/Earth Sciences/Science & Technology 11)	4 credits
Mathematics 10 (Apprenticeship and Workplace Math 10 or Foundations Math 10)	4 credits
Mathematics 11 (Apprenticeship and Workplace Math 11 or Foundations Math 11 or Pre-calculus Math 11)	4 credits
Physical Education 10	4 credits
A Fine Arts <u>or</u> Applied Skills 10 <u>or</u> 11 <u>or</u> 12	4 credits
Planning 10	4 credits
Graduation Transitions Package	4 credits
Elective Courses (10 <u>or</u> 11 <u>or</u> 12):	28 credits
Also a minimum of 16 credits at the Grade 12 level including Language Arts 12 (English, English First People's or Communications 12). All ministry-authorized and board/authority approved courses count.	80 total

Important Information

Government exams will be required for English 10, Science 10, Math 10, Social Studies 11 or BCFN 12, and English 12 or Communications 12.

Be careful when you drop a course late in the school year – it could be the one you need to graduate.

To graduate, you need at least 48 credits from **Required Courses** – subjects such as Language Arts (English), Social Studies, and Science. As well, you need 28 credits from Elective Courses and four credits for Graduation Transitions. A minimum of 16 credits at the Grade 12 level is required, including English 12 or Communications 12.

Don't forget that post-secondary institutions often require you to complete specific courses to get into certain programs. Careful planning in Grades 10, 11 and 12 will ensure you have all the courses and credits you need.

Graduation Transition Plan (4 credits)

Students will be required to assemble a presentation of learning to demonstrate their competencies in any of the following areas:*

Student Support Services (STSS): Learning Assistance Resource Program

The Student Support Services Department (STSS) offers a wide variety of approaches for students with learning difficulties and/or special needs. Placement within STSS programs is dependent on referral, assessment and/or recommendation. A flexible approach is taken to individual programming and support.

LEARNING ASSISTANCE (LA): provides support for students in the regular program who have mild to moderate learning difficulties. This assistance can take various forms ranging from in-class to a regular block in the Learning Centre. Each LA student is assigned to a Case Manager who is primarily responsible for managing the student's program and for monitoring the assessment and evaluation of the student's progress. A student may take LA on a short-term or long-term basis. Entry and exit from Learning Assistance is on a consultative basis and decisions will be made in the best interest of the student given his/her background and current circumstances.

RESOURCE PROGRAM: The Resource Program provides in-depth support (i.e. planning, placement, modes of instruction, integration, employment experiences, etc.) for those students who have been assessed and designated as Resource Program candidates by the School District (e.g. learning disabilities, physically challenged, etc) and who may need an alternate route to graduation. Each student in the Resource Program is assigned to a Case Manager who is primarily responsible for establishing/managing the student's program and for monitoring the assessment and evaluation of the student's progress.

COURSE CONTENT AND SKILLS:

Course content for both LA and Resource Programs is primarily based on the assignments, projects, exercises, research, etc. from courses in the student's program. Students may be working on a regular program or on an Adjusted Program depending on their needs and background. Other work may be assigned to reinforce and/or supplement concepts taught in the student's regular program. In some cases, students may work on alternative courses or individually designed programs in either an integrated setting or in the Learning Centre. Access to the library is always available.

As well as assistance with class assignments, projects, tests, etc., students are encouraged to improve in areas such as management and organization, study skills, time management, note-taking skills, test preparation, life skills, etc. depending on individual needs. These 'learning how to learn' skills are particularly relevant for students with learning difficulties and are taught as part of both programs.

Students who have been assigned to LA/Resource Programs are monitored in the following areas each time they attend the Learning Resource Centre:

- (1) Attendance (2) Punctuality (3) Bringing Agenda & Supplies (4) Personal goals for the period
- (5) Bringing books/work (6) Being on-task (7) Completing work as stated in their personal goals

A major objective of this program is for students to develop skills so that the student can take responsibility for his/her own work at an increasingly independent level.

FREQUENTLY ASKED QUESTIONS TO CONSIDER WHEN PLANNING YOUR COURSES

How many courses should I take each school year? All students are expected to take 8 courses per school year. An exception may be made with approval of school administration. The expectation in such exceptions is that the student will be allocated a supervisory teacher and a location for study purposes.

When should I choose my elective (selected studies) courses? You should choose your elective courses only after considering what your past achievement has been, what career path you would like to follow, and what advice has been given by counselors, teachers and parents/guardians.

How do I find out about post-secondary institutions' entrance requirements? Most general requirements are included online and in university calendars outlining detailed requirements for specific programs. All students should research their chosen fields of study and familiarize themselves with the entrance requirements, and plan their courses at PSS accordingly.

How do I know what high school courses are required for post-secondary entrance? The requirements vary for each institution and program of study, but there are some standard requirements listed on the each post-secondary schools' web site. Familiarize yourself with these early and make a plan for taking the appropriate courses. For example, Physics 11 is a required course for engineering at university, and French 11 or an equivalent language is required for entrance into University of BC or Humanities.(e.g. History, English, International Studies) at University of Victoria.

Provincial scholarship exams-How many exams will I have to write? Courses with provincial exams include: English 10, Math A/W 10 or Foundations Pre-Cal. Math 10, Science 10, Social Studies 11 (or BC First Nations 12) and English 12 (or Communications 12). All provincial exams count for 20% of the final grade except for English 12 and Communications 12 which have the exam worth 40% of the total final grade.

What if I want to change my timetable after I've already selected my courses? If you wish to change your timetable before school begins the following September, please make an appointment with the counselor who will try and help fulfill your request. If you want to make changes after the term has begun you must make sure you have an educationally sound reason, and discuss this with the counselor and your parents/guardians. The deadline for any course change is three days after the term has begun.

How does the school decide what electives to offer? All electives courses are offered based on student demand and teaching time available within our school timetable.

What if I can't get the senior course I want? There may be a few occasions when the school is not able to offer the senior-level course you want. If this happens, speak to our counselor about distance learning options such as online courses.

When must I take "Applied Skills" or "Fine Arts" courses? In either Grade 10, 11 or 12 you must take one Applied Skills or one Fine Arts course.

LEARNING AND ADDITIONAL CREDITS IN THE GRADUATION PROGRAM

Students may be able to obtain high school credit in the following ways. For more information please contact our school counselor.

EQUIVALENCY

Course equivalency is the process of receiving credit, based on documentation which indicate the student has achieved the learning outcomes for an approved grade 11 or grade 12 course outside of the BC school system. Common situations may involve students who have moved from another province or country, or who have credentials from an out of school program that school boards or the Ministry have deemed equivalent.

INDEPENDENT – DIRECTED STUDIES (IDS courses)

Independent-Directed Studies (IDS) allows students to initiate, develop and complete their own courses under the supervision of a teacher. An IDS course must be based upon the learning outcomes of a Ministry Authorized. Students may get one, two, three or four credits at the grade 10, 11 or 12 level.

EXTERNAL COURSES

An external course is an organized set of learning activities that is developed or offered outside the BC School System. Students may earn credit for successfully completing an external course approved by the Ministry. For example, a student who has completed their Grade 8 Piano through the Royal Conservatory of Music could receive credit for Music 12. The ministry has supplied a list of the external youth development courses, sports programs, music courses, and industrial and occupational courses that will be recognized for Grade 11 or 12 credit. The counselor has a complete list of all ministry approved external courses.

CHALLENGE

If documentation is not available to do an equivalency review, it is appropriate for a student to challenge a course. If a student has not taken the course, but feels that they can challenge the learning outcomes then they may go through the challenge process. There is a fee and applications may be obtained through the counselor.



School District #48 Online Program

The Sea to Sky School District's Outreach program is for students and parents who want flexible, alternate options for schooling. The program combines the best aspects of self-directed study, face-to-face tutoring, home schooling, and Internet technology. Students learn at their own pace and set their own timetable so that they can accommodate schooling as well as other commitments like sports, arts, or work. Offering several online courses, the Outreach Program can stand alone, or be combined with classes in other schools within the District. For more information visit <http://seatoskyonline.com> or talk to your school counselor. Students must seek approval before taking an online program.

BC Online Learning

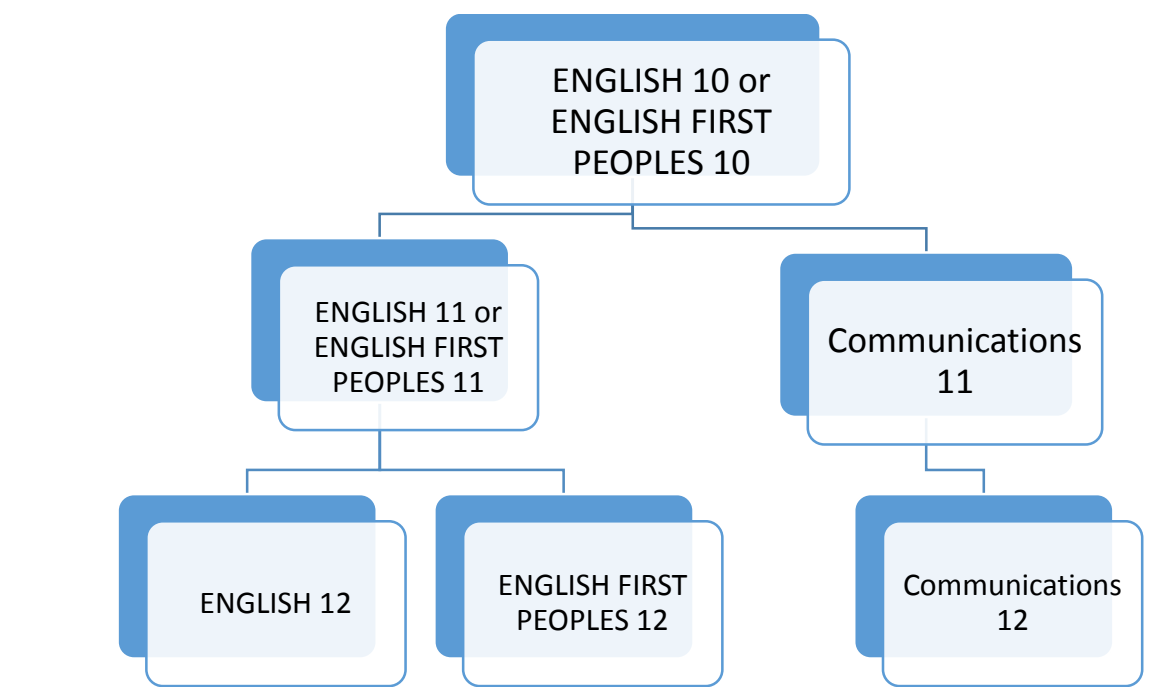
Learn Now BC includes a one-stop website available at <http://www.learnnowbc.ca> that links students to distributed learning courses offered by 47 B.C. school districts (including the Howe Sound Online Learning Program). The new virtual school also provides a host of services for students, parents and educators, including:

- A course finder – this search tool helps students find available distributed learning courses and tells them which school districts offer the course they are looking for.
- Online tutoring – tutors will be available for students enrolled in Math 10 and Science 10 distributed learning courses.
- Academic advice – services, including a toll-free number, will be provided to help students with course planning and options, graduation requirements and preparation for post-secondary admissions.

Course Descriptions

Language Arts Program

Pathways



Humanities 8

Humanities 8 combines the learning outcomes of both **English 8** and **Social Studies 8** through a year-long course designed to provide students consistency and opportunity to integrate both subjects in a meaningful, challenging and supportive environment. In **English 8**, we will be using oral language, and written, visual and digital texts to explore literature in novels, short stories, poems and film as well as non-fiction selections. The historical timeline for **Social Studies 8** covers a very broad and vast period of history: from the 7th century all the way to 1750.

Students enrolled in the grade 8 French Immersion program will pursue **English 8** separately, as **Social Studies 8 (Science Humaines 8)** as well as **Français Langue 8** are offered within their French Immersion schedule.

Humanities 9

Humanities 9 combines the learning outcomes of both **English 9** and **Social Studies 9** through a year-long course. The historical timeline for **Social Studies 9** covers a broad and complex period of history: from 1750 to 1919.

Students enrolled in the grade 9 French Immersion program will pursue **English 9** separately, as **Social Studies 9 (Science Humaines 9)** as well as **Français Langue 9** are offered within their French Immersion schedule.

English 10 First Peoples

English 10 First Peoples is the academic equivalent of English 10 and is intended for Aboriginal and non-Aboriginal students. This course invites all learners to explore and discover First peoples' world views through the study of literary, informational and media text with local, Canadian and international First Peoples' content emphasizes the study of literature and composition. In addition, students are introduced to the expository essay and persuasive writing techniques. This course or English 10 is a required course for successful completion of high school. **A mandatory provincial exam accounting for 20% of the final grade is written upon completion of course work.**

English 10

Through integration of reading, writing, listening and speaking, English 10 emphasizes the study of literature and composition. In addition, students are introduced to the expository essay and persuasive writing techniques. English 10 is a required course for successful completion of high school. **A required provincial exam accounting for 20% of the final grade is written upon completion of course work.**



English First Peoples 11

English 11 First Peoples is the academic equivalent of English 11 and is intended for Aboriginal and non-Aboriginal students. This course invites all learners to explore and discover First peoples' world views through the study of literary, informational and media text with local, Canadian and international First Peoples' content. Students will develop the English language and literacy skills and capacities they must have to meet British Columbia's graduation requirements.

English 11

English 11 is a compulsory course. English 11 continues to develop students' ability to interact effectively with text. Increased levels of sophistication in thinking, writing, reading, and oral communication is a primary focus.

Communications 11

Communications 11 is intended to build skills in comprehending and producing language. This course focuses on the development of practical communications skills. Students learn to use language appropriate to the situation, audience, and purpose in their lives and in the workplace. Students also explore Canadian and world literature as a way of understanding their literary and multicultural heritage.

English First Peoples 12

English 12 First Peoples is the academic equivalent of English 12. Students will develop the English language and literacy skills and capacities they must have in order to meet British Columbia's graduation requirements. This course provides opportunities for all students to engage with



indigenous creative expression and enter the worlds of First Peoples provincially, nationally and internationally. The course focusses on the experiences, values, beliefs and lived realities of First Peoples as evidenced in various forms of text - including oral story, speech, poetry, dramatic work, dance, song, film, and prose (non-fiction and fiction). **This course has a mandatory Provincial Exam component worth 40% of the final grade.**

English 12

English 12 builds on ownership of learning, and developing a voice in oral and written communication while increasing sophistication in writing and reading by focusing on more complex tasks and texts. Language knowledge and skills are taught within the context of the six language arts processes of speaking, listening, writing, reading, viewing, and representing. **The course has a required provincial exam accounting for 40% of the final exam.**

Communications 12

Communications 12, intended for students for whom English is not a strength, allows students to graduate, **but limits the post-secondary institutions they can attend.** Communications 12 is designed not only to provide students with their graduation requirements, but also to enhance and improve their skills. The emphasis is on process with writing and speaking skills receiving particular attention. Literature will be used to assist skill development in a variety of learning experiences. Students work as individuals, in small groups, and as part of a whole class. **This course has a mandatory Provincial Exam component worth 40% of the final grade.**

French Programs

French 8

French 8 gives a review of vocabulary and concepts introduced in Grade 7 and focuses the students' oral and written command of grammatical structure. Activities designed to further cultivate appreciation for French language and culture occur through the course.

French 9

French 9 gives a review of vocabulary and concepts introduced in Grade 8 and focuses on enhancing the students' oral and written command of more sophisticated grammatical structure. Activities designed to further cultivate appreciation for French language and culture are carried on periodically.

French 10

Expanded use of vocabulary and grammatical structures previously introduced is carried on with increasing emphasis on the student's written and spoken command of the language. Interest in French culture continues to be promoted.

French 11

Successful completion of a second language at the grade 11 level is required for admittance to the major three BC universities

Equal emphasis continues to be placed on the four skills of speaking, reading, writing and listening. Interest in and appreciation of French culture is promoted through course content.

French 12 (offered every other year)

French 12 places continued emphasis on the development of listening and oral speaking skills, but at the same time concentrates on further developing reading and writing skills. There will be an introduction to poetry to accompany the additional readings, further study of more sophisticated grammar, and practicing and polishing of composition style.

French Immersion Grade 8

This program will include 50% of the individuals courses in French immersion and include the following courses: **FRANÇAIS Langue 8 (FFRAL 8); SCIENCE HUMAINES 8 (FSCH-8), Mathématiques 8 and Sciences 8.**

French Immersion Grade 9

This program will include 50% of the courses taken in French immersion and include the following courses: **FRANÇAIS Langue 9 (FFRAL 9); SCIENCE HUMAINES 9 (FSCH-9), FRANÇAIS Langue 9 (FFRAL 9); SCIENCE HUMAINES 9 (FSCH-9), Mathématiques 9 and Sciences 9.**

French Immersion Grade 10

**French Immersion 10 includes three mandatory courses:
FRANÇAIS Langue 10 (FFRAL 10)**

This is a language/literature course taught in French that covers advanced aspects of French grammar. It provides exposure to French literature under the genres of short stories, plays and novels.

SCIENCE HUMAINES 10 (FSCH-10)

This course which is taught in French replaces Social Studies 10 and is mandatory for all students in the French immersion program. This course covers Canadian History from 1815 to 1914. Topics include Confederation, settlement of the West and a geography component.

PLANIFICATION10 (FPLAN10)

This planning 10 course is offered in the French language and is designed 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.

- Planning 10 provides opportunities for students to plan for successful completion of the Graduation Program.
 - To explore a wide range of career and post-secondary education and career options.
 - To think critically about health issues and decisions.
 - To develop financial literacy skills.
 - Plan the actions required to pursue post-secondary destinations and career paths
- Students must complete Planning 10 in order to satisfy graduation requirements.

French Immersion Grade 11

French Immersion 11 includes two mandatory courses:

SCIENCE HUMAINES 11 (Government Exam) (FSCH-11)

All students who are in the immersion program must take the Sciences Humaines 11 course, which replaces Social Studies 11. It covers areas of importance to students' understanding of Canadian society. This course discusses our roles in major world events in the 20th century as Canadians and global citizens. See Social Studies 11.

FRANÇAIS Langue 11 (FFRAL-11)

This is a language/literature course that covers advanced aspects of French grammar. It provides exposure to French literature under the genres of short stories, poetry, plays and two major novels.

French Immersion Grade 12

FRANÇAIS LANGUE 12 (FFRAL-12)

To complete this French Immersion program, students need this Language/Literature course. Equal emphasis is given to oral and written skills. **Successful completion of this course and the government exam will result in a bilingual diploma.**

Leadership Courses

Aboriginal Leadership 8- 12

Aboriginal Leadership is a course offered to all students, from grades 8-12, at Pemberton Secondary. Students from the Aboriginal Leadership are eligible to join the SD48 Aboriginal Youth Council, and create school events, and raise awareness among students at PSS. Much of the course is spent in preparation for the 24 Hour Drum event in May of each year, where Aboriginal Leadership students from SD48 (and other districts) come together for a day in a celebration of culture and to raise awareness about current issues facing Aboriginal youth.

Leadership 8-12

This course is designed to help students become better leaders by honing their skills in the key areas of communication, motivation, expectation setting, and problem resolution. Students will investigate the principles of leadership and strong character, as necessary ingredients for academic excellence and effective living. Students will research, organize and facilitate a variety of school activities both curricular and extracurricular. They will also be responsible for organizing two community events and volunteering within the community. This is a fun, project based class where the students will get to apply their learned skills in a real world setting.

Peer Tutoring 11/12

Peer Tutoring 11/12 is a course for senior students (Gr. 11 or 12) who are interested in providing classroom assistance for junior classes at PSS. Interested students must be committed to spending one of their blocks to being a classroom tutor. They will be responsible for providing assistance to students and teachers. To apply for the program contact your counselor. A Sponsor teacher assessment form will be completed by the teacher whose class you tutored.

Basketball Citizenship 11/12

This course is designed to provide students on the senior boys and girls basketball teams with an opportunity to formally practice sport leadership and management. Attending a night class, and participation at practices and games is mandatory. During class students will focus on leadership (coaching and officiating) skills, and management (scheduling, finances, promotions, etc). They will practice these skills by organizing intramurals, a 3 on 3 tournament at Signal Hill, and officiating and coaching at both Pemberton Secondary and Signal Hill. This course is only open to senior basketball players.

Entrepreneurship 12 (ENT 12) – The Young Entrepreneur Leadership Launchpad (YELL)

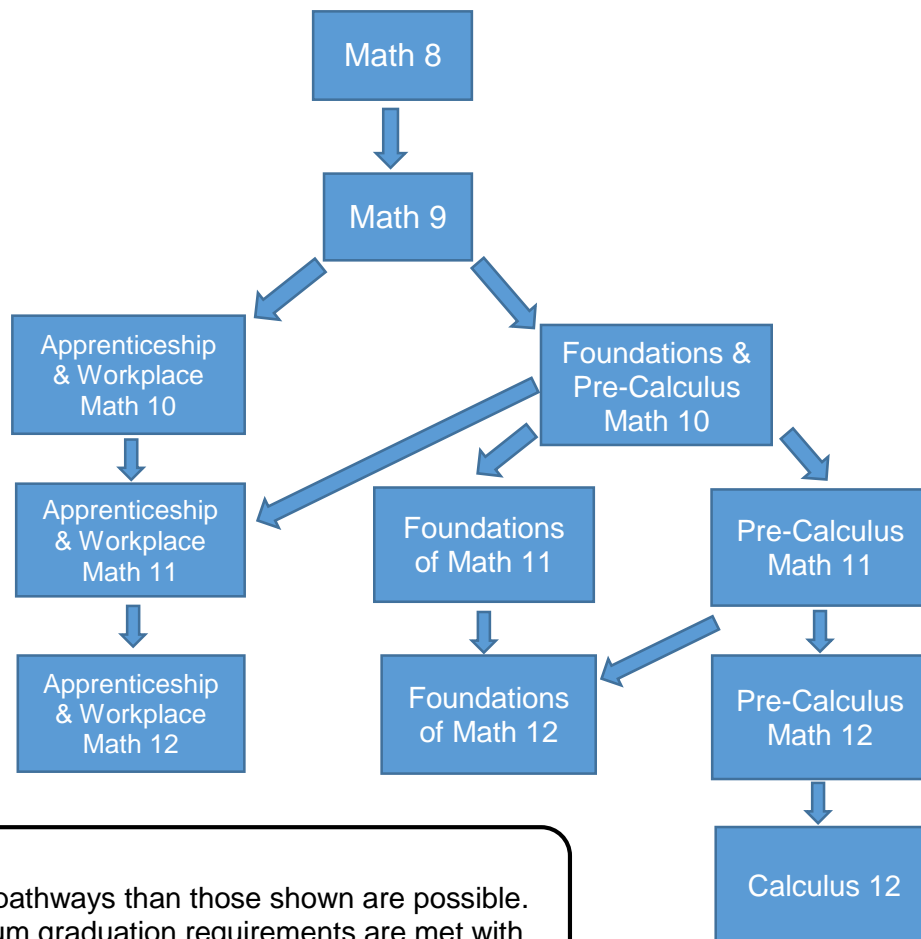
This course is for students interested in business, entrepreneurship, and innovation. Built to meet the learning outcomes of Entrepreneurship 12, this course is based on top-quality university entrepreneurship programs as well as best practices from Silicon Valley. You'll gain real word experience, hear from guest speakers and local business leaders, get matched with a mentor to help you and your team put together an innovative and world-changing business concept, and then compete with students across the province in a venture competition hosted by YELL Canada. You'll learn how to develop and evaluate a business, build a personal network of business contacts, hone your creative and critical thinking, apply teamwork skills, and put your presentation skills to the test. Ideal for someone considering or exploring their interest in business, or for anyone excited to apply what they know and see the world in a new and creative light.

No Pre-Requisites.

Mathematics

Consultation and planning are important in selecting a pathway because of the different requirements of universities, colleges, and trades schools.

Pemberton Secondary Math Courses



Notes:

1. Other pathways than those shown are possible.
2. Minimum graduation requirements are met with any Grade 11 or 12 Mathematics course.

Mathematics 8

Mathematics 8 is the core mathematics course for students. Building upon previous grades it is designed to build student skills in problem solving, number concepts, and number operations. Mathematical patterns and relations including manipulating variables and equations are covered. Use of shapes and space applied to measurement and the ability to manipulate the physical representations of mathematical relationships. Concepts of probability, uncertainty, chance and statistics as applied to analyzing data are also covered.

$$\left(\frac{3}{4} = \frac{12}{16} \right)^{x1.3}$$

For the diagonal:
 $3 \times 16 = 48$
 $4 \times 12 = 48$

Mathematics 9

Leads to: Apprenticeship & Workplace Mathematics 10 or Foundations and Pre-calculus Mathematics 10

Mathematics 9 is the core mathematics course for students. Building upon work done in previous grades it is designed to build student skills in problem solving, number concepts, and number operations. The students will work with mathematical patterns and relations including variables and equations. The course uses examples of shapes and space applied to measurement, 2-D shapes and 3-D objects and the ability to manipulate the physical representations of mathematical relations. The course also introduces the concepts of probability, uncertainty, chance and statistics as applied to analyzing data.

Apprenticeship & Workplace Mathematics 10

Leads to: Apprenticeship & Workplace Mathematics 11

This course is based on mathematics applied to the workplace and trades. Topics include SI and Imperial Units, Measurement of Perimeter, Area, and Surface Area, the Pythagorean Theorem, Geometry, Trigonometry and Finance.

A mandatory provincial exam worth 20% of the final grade is required in this course.

Foundations & Pre-Calculus Mathematics 10

Leads to: Foundations of Mathematics 11, Pre-Calculus Mathematics 11

This course will build on the concepts learned in Mathematics 9. Topics include graphical and algebraic approaches to Linear Relations and Systems, Polynomials, Exponents/Powers, Surface Area, Volume and Trigonometry.

A mandatory provincial exam worth 20% of the final grade is required in this course

Apprenticeship & Workplace Mathematics 11

Leads to: Fulfills graduation requirements, but also leads to Apprenticeship & Workplace Mathematics 12

This course is based on Mathematics applied to the workplace and trades. Topics include SI and Imperial units, Surface Area, Volumes, Slope and Rate of Change, Trigonometry, Modeling and Drawing 2-D and 3-D Objects, Finance, and Creating/ Interpreting Graphs.

Foundations of Mathematics 11

Leads to: Fulfills graduation requirements, but also leads to Foundations of Mathematics 12

This course covers Rates, Scale, Area, Surface Area and Volume of 2-D Shapes and 3-D Objects, Geometry, Trigonometry (Sine and Cosine Laws), Reasoning, Normal Distribution and Interpretation of Statistical Data, Systems of Linear Inequalities, Quadratic Functions and a Research Project.

Pre-Calculus Mathematics 11

Leads To: Pre-Calculus Mathematics 12 and Calculus 12

Topics include Factoring, Systems of Linear Inequalities, Quadratic Functions, Quadratic Equations, Absolute Value, Radical and Rational Expressions/Equations, Reciprocal Functions, Arithmetic and Geometric Sequences/Series and Trigonometry (Standard Position, Special Angles, Sine and Cosine Law).

Apprenticeship & Workplace Mathematics 12

This course is based on mathematics applied to the workplace and trades. Topics include SI and Imperial units, surface Area, Volumes, Slope and Rate of Change, Trigonometry, Modeling and Drawing 2-D and 3-D Objects, Finance, and Creating/Interpreting Graphs.

Foundations of Mathematics 12

Topics include Mathematics of Finance, Logic and Reasoning, Probability, Combinatorics, Polynomial, Exponential, Logarithmic and Sinusoidal Functions, and a Research Project.

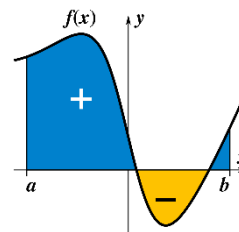
Pre-Calculus Mathematics 12

Leads to: Calculus 12

Pre-Calculus Mathematics 12 is a challenging course. Topics include Trigonometry, Relations and Functions (Composition and Transformations), Logarithmic and Exponential Functions and Equations, Polynomial, Radical and Rational Functions and Equations, and Combinatorics.

Calculus 12

Calculus 12 is intended for students who are considering science or mathematics-related post-secondary programs of study. It is recommended that Pre-Calculus Mathematics 12 is taken prior to this course. Students completing Calculus 12 are eligible to write the UBC-SFU-UVic-UNBC Challenge Examination in June, which allows students to attain advanced standing in Calculus courses at those institutions. Topics Include: Functions, Graphs and Limits; the Derivative (Concept and Interpretations, Computing Derivatives); Applications of Derivatives (Applied Problems, Derivatives and the Graph of the Function); Antidifferentiation (Recovering Functions from their Derivatives and Applications of Antidifferentiation).



Sciences



Science 8

The focus of Science 8 is on biology (cells and systems); physical science (optics; fluids and dynamics); and earth and space science. Students will be expected to perform experiments using the scientific method and demonstrate an understanding of the characteristics of living things. They will also explore the science of the behaviour of waves and discuss the concept of force. An understanding of the relationship between solids, liquids, and gases will be covered in addition to the significance of the water cycle

Science 9

The focus in Grade 9 is on Reproduction; Atoms, Elements, and Compounds; Characteristics of electricity; and Space Exploration. Throughout the course, students will continue to improve on their process skills from Grade 8 such as using the scientific method, laboratory skills, scientific literacy, science principles and technology, and interpreting scientific information and data.

Science 10

This course continues with the themes of the Junior Science Program: The focus in Grade 10 is on sustainability of ecosystems; chemical reactions and radioactivity; motion; energy transfer in natural systems; and plate tectonics. This course will also continue to focus on improving student's process skills. Successful completion of this course will give the student a base of knowledge from which to choose their senior science course.

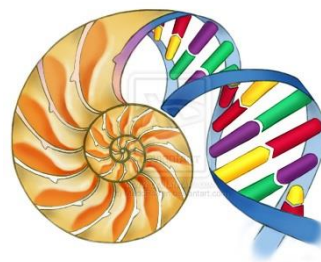
A mandatory Provincial exam worth 20% of the final grade will be required in this course.

Earth Science 11

This is an introductory course in geology and earth science that focuses on the structure of the earth and the forces that shape and change its landscapes. Areas of study include rocks and minerals, weathering and erosion, tectonics, volcanism and earthquakes; oceans; and meteorology.

Biology 11

This surveys a representative sample course of organisms ranging from the simplest to the most complex. The aim of the course is to provide the student with a variety of biological skills including lab work and procedures using the light microscope. Areas of study included DNA, microbiology, and plant and animal biology. The course will mainly include lectures labs, and projects. Students will find the range of new science vocabulary challenging.



Biology 12

Students taking Biology 12 will gain an understanding and knowledge of cell biology and human physiology. Areas of study are cell organelles, cell compounds, digestive system, circulatory system, nervous system, respiration, excretion, and the reproductive system. We finish off with a fetal pig dissection.

Chemistry 11

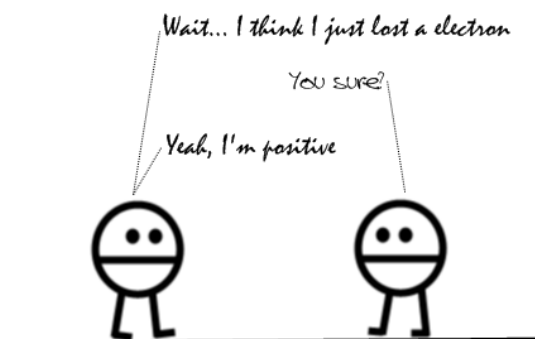
(Recommendation that Foundations of Math11 or Pre-Calculus11 be taken concurrently). This is an introductory course in chemistry designed to help students increase their knowledge of chemical techniques and concepts. This course is intended to be a beginning survey of basic principles of chemistry and will include such topics as properties and naming of substances, the mole concept, chemical reactions, and atomic structure and bonding.

Two atoms,
walking down a street...

Chemistry 12 (offered every other year)

(Foundations of Math 11 or Pre-Calculus Math 11 is strongly recommended)

This course is a more specialized course than Chemistry 11. A strong emphasis is placed on advanced problem solving and theory of chemical principles. A strong background in math is necessary. The course is divided into five major topics: reaction kinetics; equilibrium; solubility of ionic substances; acids, bases, and salts; and oxidation reduction.



Physics 11

(Foundations of Math 11 or Pre-Calculus Math 11 is strongly recommended)

This is an introductory physics course designed to provide insight into the scope and nature of physics principles. The major topics include wave motion, one-dimensional motion (gravity, friction, elastic forces, momentum, acceleration, velocity, and projectiles), energy, special relativity, and nuclear fusion and fission. Students should have strong math skills and an interest in applied problem solving.

Physics 12

(Physics 11 and Pre-Calculus Math 11 is strongly recommended)

This course is an extension of Physics 111 and is intended to provide students with a grounding in the discipline of physics. The range of topics concentrates on two basic areas: mechanics and electromagnetism. Topics will include two-dimensional motion (projectiles, momentum); electricity and circuits; and magnetism. Strong Math skills are necessary for this course.

Social Studies

Humanities 8

Humanities 8 combines the learning outcomes of both **English 8** and **Social Studies 8** through a year-long course designed to provide students consistency and opportunity to integrate both subjects in a meaningful, challenging and supportive environment. In **English 8**, we will be using oral language, and written, visual and digital texts to explore literature in novels, short stories, poems and film as well as non-fiction selections. The historical timeline for **Social Studies 8** covers a very broad and vast period of history: from the 7th century all the way to 1750. Students enrolled in the grade 8 French Immersion program will pursue **English 8** separately, as **Social Studies 8 (Science Humaines 8)** as well as **Francais Langue 8** are offered within their French Immersion schedule.



Humanities 9

Humanities 9 combines the learning outcomes of both **English 9** and **Social Studies 9** through a year-long course. The historical timeline for **Social Studies 9** covers a broad and complex period of history: from 1750 to 1919. Students enrolled in the grade 9 French Immersion program will pursue **English 9** separately, as **Social Studies 9 (Science Humaines 9)** as well as **Francais Langue 9** are offered within their French Immersion schedule.

Social Studies 10

Social Studies 10 deals primarily with Canadian history and physical and economic geography. The course begins with a review of map skills and basic concepts in geography in a Canadian context where possible. It then covers Canadian history from 1815 through Confederation followed by the development of Western Canada until 1914. Following this, attention is given to Canada's economic geography before focusing on economic development in British Columbia.

Social Studies 11

Social Studies 11 is divided into three main parts. We will learn about the structure of the Canadian government, political issues, and what the rights and responsibilities of the citizen are. We will study human geography, which includes such topics as population, urban planning, and the environment. And the third and biggest part of the course is 20th century Canadian history, which covers such topics as the two world wars, the Depression, and how Canada ended up the way it is today. **This course has a mandatory Provincial Exam worth 20% of the final grade. Students should have met the learning outcomes of this course and completed all major assignments before writing the provincial exam.**

BC First Nations Studies 12

BC First Nations 12 is a provincially prescribed elective course suitable for all students in BC schools. The course is primarily BC focused, emphasizing the traditions and history of British Columbia's First Nations peoples, and modern struggles for rights. The course also investigates First Nations art, literature, and economic successes.

This course may be used for a Social Studies 11 credit. It has a provincial exam component worth 20% of the final grade.

Psychology 11

An introduction to the study of psychology: the study of the human mind and human behavior. You will learn about yourself and those around you by studying and attempting to explain and predict why people behave, think and feel as they do. Major projects, assignments, and quizzes.

Law 12

In this course, students survey Canadian law from its origins to emerging issues, while engaging in a variety of different activities. The use of case studies, a field trip and mock trial will give students an excellent introduction to our legal system. This course is not just for future lawyers, police and social workers; everyone will benefit from a better understanding of Canadian law.



History 12

History 12 is a world history course which examines the major events and trends of the twentieth century. Students must be prepared to learn what happened and be able to suggest reasons why events unfolded the way they did. Students should be prepared to do a lot of reading and studying for homework.

Comparative Politics 11

This course introduces students to fundamental concepts used to study the different political ideologies internationally. The course aims to illustrate the rich diversity of political life, including how politics are impacted by both culture and religion. Ideas including “the individual vs. the state,” and “democracies vs. regimes,” will be explored, and case studies of individual countries and their successes/failures within their political structures will be examined. Students will gain the skills to critically examine world politics, policies and issues with a better understanding of the challenges of governance

Geography 12

This is an academic course that examines the physical and human environments and their interrelationships. In depth study of the atmosphere, climate, weather, tectonics, volcanoes, land forms, biomes, ecosystems and resource management. The course focuses on human interactions with the environment and becoming a global citizen. Students will examine the factors affecting the natural physical world and investigate the effect on human activities. Classroom activities include case studies, discussion, research and presentations.

Fine Arts / Applied Skills



Fine Arts 8/9

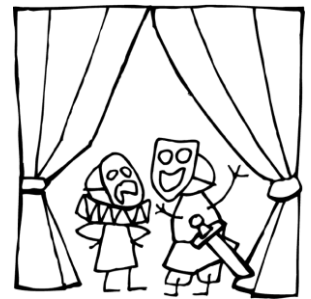
These courses offer experience in a variety of visual expression areas. Students will create unique artwork and will have an opportunity to experiment with different media. Visual expression areas may be drawing, painting, sculpture, textiles and printmaking. The course includes a study of the elements, principles and strategies of design.

Art 10/11/12

These courses offer experience in a variety of visual expression areas. Students will have an opportunity to experiment with different media. Visual expression areas are drawing, painting, ceramics, mixed media, and sculpture.

Music 10/11/12

These courses allow students to expand and refine their musical abilities in relation to particular specialties (i.e. music composition or ensemble performance.) Students will acquire the knowledge, skills and attitudes that enable them to be involved in music as a lifelong interest or to pursue careers in music and related fields



Drama 8/9

This is a creative drama class whose primary aim is to help you discover some things about the theatre, but more importantly, to discover some things about yourself. Confidence and communication are the two main themes. Most activities in class will be centered on the imaginations of those in the class. It is not “doing plays” or “just working the lights”. The activities and exercises are preparation for an eventual production of a play, but students will soon realize that a script is just a collection of pages and print requiring many skills to bring it to life.

Theatre 10/11/12

This is a project based course that gives students the opportunity to explore both the performance and the production sides of theatre. Over the semester, students will learn acting, dancing, and singing skills that will help improve their acting repertoire. They will also gain experience in set design and construction, costume making, make up design, light and sound design, and advertising and promotion. It is a great class for students to explore their creative sides be it in performance or design.



Computers 8/9

This course will introduce the students to the elements of design and layout in the electronic medium. Students will focus on preparing work for both print and web publishing. The course is project based and will cover instruction in MS Word, MS Publisher, Adobe Photoshop, Dream weaver web design and Macromedia Flash.

Desktop Publishing & Yearbook 10/11/12

This course will introduce the students to the elements of design and layout in the electronic medium. Students will focus on preparing work for both print and web publishing. The course is project based and will cover in depth instruction in MS Publisher and Adobe Photo Shop.

In addition, the students in this course will use their graphic design skills to create the school yearbook. Students will use digital photography to document school community and the yearbook will be edited using an EDesigndigital program. If you are interested in graphic design and creating your own published book this is the course for you.

Drafting, Design and Technology 10 - 12

This course focuses on the areas of designing, drawing and building. Students will design, draw and build different projects using both conventional drafting methods and AutoCAD software which is the industry standard in the areas of designing, architecture and engineering. Students will work through the design process and draw and build projects such as hydraulic arms, solar powered cars, radio controlled vehicles, scale model bridges and glider planes. The area of architecture will also be covered through students producing floor plans, elevation views and scale models of houses.

Photography 10/11/12



Photography is a studio based course in which students will learn about digital photography. Students will be introduced to digital photography and how to manipulate digital images on the computer using software programs such as Adobe Photo Shop and Adobe Lightroom. Students will develop an understanding of contemporary photographers and issues specific to photography. Students will create art that has personal, social, and historical content.

Drama Film and TV Media Studies 11/12

This course studies video production, and provides students with opportunities to practically apply the knowledge and skills required to participate in the film or video business. Students will be involved in all aspects of production (scripting, storyboarding, filming, lighting, acting, etc.) and in post-production (editing, F/X, etc.). A series of short projects will include a mix of drama, documentary, informative, stop action and other types of video format.

Woodwork 8/9

This is an exploratory course that allows students to have an opportunity to design and work with wood. Students will explore the design process and build small projects such as a mirror, decorative box, cutting board and picture frame.



Carpentry & Joinery 10/11

This course covers all the basics of furniture design and construction. All students will design and build a small cabinet or piece of furniture. This will be done through the safe and proper use of equipment and applying the design process.

Carpentry & Joinery 12

The focus of this course is cabinet making which is referred to as millwork and joinery. The course will cover all of the basics of cabinet making. This includes joinery techniques, materials, fasteners and finishing. All students will design and build some form of cabinet.

Metal Art 8/9

This course is part of the Grade 8/9 rotation and introduces students to metal art. They will learn how to use a variety of metal shop tools and machinery. Students will have the opportunity to design and create their own metal work projects.



Metal 10/11/12

Students will learn how to use a variety of metal shop tools and machinery. Students will have the opportunity to design and create their own metal work projects.

Mechanics 10

Discover what is behind the magic of how engines work. In this course you will get to take apart a small engine and learn about this fascinating technology. You will get an opportunity to find out more about exciting new green power sources, and you will compete in challenges where you create your own elastic or spring powered mini-vehicle and race!

Automotive 11

If you think you will ever drive a vehicle, this course is for you! You will learn about various automotive systems, complete service labs and have a chance to work on your own personal projects. From changing oil to adjusting ignition timing, you will know everything you need to know to be an automobile owner.

Tourism 12

If you are looking for skills, information and training in BC's #2 industry, this course may be for you. Tourism 11 introduces students to the tourism industry. Students will have the opportunity to acquire a number of Tourism related certificates including **Worldhost – 'Face to Face' and 'Service Across Cultures', 'St John Ambulance - Emergency Level First Aid', 'Foodsafe - Level 1', and 'Serving it Right'**. Classes focus on discussion, working in small groups and projects. Regular attendance is necessary to receive your certifications.



Foods & Nutrition 8/9

During this program students will learn the basics of reading recipes and preparing a variety of nutritious and great tasting meals. In addition to this, students will explore a variety of areas in the culinary arts through project based learning.

Foods and Nutrition 10/11/12

This course is designed to give students the nutritional knowledge, skills and experience to create well-balanced, tasty meals, as well as exciting their curiosity about baking and cooking. Foods 10- 12 is an ideal course for those students who have ambitions to work in the food and beverage industry or go on to culinary school. Throughout this course we will examine many topics such as: ethnic cooking, careers in the food's industry, nutritional trends, dieting, and current issues regarding our food security. At the end of this course students should be confident in their ability to plan, prepare meals for themselves and others as well as gain employment in the food and beverage industry.

Cafeteria Training 11/12

Students will prepare, package, and serve various foods daily. Students will develop an awareness of the need for constant attention to safety and hygiene within public food-service operations, gain an understanding of the principles of quantity food preparation, and learn to prepare tasty, attractive, and nutritious foods in a cost-and time-effective manner. Students will learn about the role of the food-service industry in today's economy and explore career options.

Family Studies 12

Family Management focuses on the reciprocal relationships among self, family and society. Students increase their knowledge and develop skills through activities such as interviews, research, role plays, case studies, presentations and community involvement. Through exploration of human and family relationships, students can apply their learning to personal needs or careers in human services. Students will be required to take part in the Baby Module.

Physical Education

Physical Education 8/9/10

'Just Do It' sums up what these courses are about. Daily activity and instruction centered around individual and team sports, personal fitness and training programs, and games, will encourage students to be more active not only for the semester but hopefully for their entire lives.



Physical Education 11/12

You don't need to be a 'jock' to be successful in this course, however, this program is designed for students who like to be physically active. Through individual and team sports, personal fitness and weight training programs, students will be exposed to activities and information which will continue to promote a positive attitude toward an active, healthy lifestyle, not only today but for the years ahead. Another major component of this course is Leadership development which occurs through group management training and peer teaching. Bring a positive attitude and fully participate every day and you'll do fine.

CAREER TRAINING PROGRAMS

“... this was such an incredible experience for me that will change the outcome of my life.”

If you are a senior student with a positive attitude, strong work ethic, and want a meaningful, hands on experience to explore a career, one of our three *WORK EXPERIENCE* options might interest you.

What is it?

Earn from 4 to Grade 12 graduation credits

Explore a career area of interest

Obtain references and contacts for future jobs

Improve the chance of acceptance into post-secondary programs

Increase self-confidence, self-reliance, and improve employability skills

A major component of a **WORK EXPERIENCE** program is a 100 to 200 hour work placement with a business or industry. During this time the student will work under the supervision of an employer who has agreed to work with the school in providing realistic work experience and training.

Work Experience: What are the “CHOICES”????????

1. SECONDARY SCHOOL APPRENTICESHIP (SSA)

Apprenticeships are available to Grade 11 or 12 students who are committed to a career in an apprentice able trade. SSA combines academic course work with paid work placements. Students will be registered as apprentices and can earn up to 1600 hours toward their apprenticeship credential while earning up to 16 credits (480 hours) for high school graduation.

2. PEAK EXPERIENCE

Whistler/Blackcomb provides Grade 11 or 12 students with 100 hours of weekend work placement in the Ski Industry from December to April. Students can earn 4 grade 12 graduation credits in completion of this program.

3. WORK EXPERIENCE

Work Experience allows Grade 11 or 12 students to earn 4 or 8 grade 12 graduation credits through completing 100 or 200 hours of work placement. No course prerequisites are needed. A major component of a **WORK EXPERIENCE** program is a 100 to 200 hour work placement with a business or industry. During this time the student will work under the supervision of an employer who has agreed to work with the school in providing realistic work experience and training.

The Outdoor Program

A Program for Grade 10 Students

This program is offered in the second semester of the 2016/2017 school year. Students taking this program will receive credit for four courses. The four courses that are covered and student will receive credit for are:

- Physical Education 10
- A school board authorized credit towards their grade 10 course requirements
- Planning 10
- English 10

The main purpose of this course and the philosophy behind it is to provide students with unique outdoor recreation experiences, promote healthy lifestyles, provide students the opportunity to develop teamwork and leadership skills and learn the importance of responsibility and accountability. Outdoor skills will be acquired through the outdoor activities that students will participate in and the related classroom activities.

It is hoped that through this course students will also develop an awareness and appreciation of recreational opportunities in our area and pursue these forms of recreation as part of a healthy lifestyle.

Here are some of the activities and areas we hope to cover:

Avalanche Safety and Awareness	Marine Charts and Navigation
<u>tification Course)</u>	Trip Planning
Nordic (Cross Country) Skiing	First Aid (<u>Certification Course</u>)
Snow Shoeing	Wilderness Camping Skills
Orienteering	Emergency Preparedness
- use of maps, compass and GPS	Nutrition and Diet
Rock Climbing	Environmental Assessment and Land
River kayaking	Issues
Ocean Kayaking	Wildlife Studies and Surveys

Certification Courses

Students will have an opportunity to be certified in the following courses through taking the Outdoor Program:

- Emergency First Aid (St. John Ambulance)
- Companion Rescue Skills (Avalanche Canada)

For students to participate in this course they must have a willingness to work effectively with others and be able to follow directions and instructions. Students should also enjoy outdoor activities, be willing to try new activities and be adaptable to challenging situations. Students do not need to have had outdoor experience; getting outdoor experience is largely what the course is all about. Students should also be relatively physically fit. This course has a limited enrollment, an application is required. Additionally, in order to be considered for the program students need to have a strong school record of effort, attendance, cooperation, responsibility and ability to work with others.

The cost for students to take this course is \$550, this charge is to cover the cost of the activities. Students may make application to the Al Grey memorial bursary to have the cost of the program covered; this bursary covers the cost for one student. Students can see Mr. Hargitt for an application to take the course and an application for the bursary.

Ski, Snowboard & Bike Academy (SBBA)

A Program for Grade 11 & 12 Students



The SBBA is offered to grades 11 & 12 during second semester, and includes one elective course (ski, board & bike), and a Physical Education credit. The learning goals in this program focus on skill development and career preparation in a variety of areas pertaining to mountain adventure sports.

Students will be trained by professional coaches on the slopes, the trails and in the classroom; including 18 days of instruction on Whistler/Blackcomb and 27 half days of bike instruction on the trails around Pemberton.

Ski & snowboard instruction will focus on basic techniques, racing, slopestyle, freeride and backcountry; while the biking instruction will be centred around enduro style riding on the trails around Pemberton and will include BMX, jumping, pump-track, and road riding. Certifications include Ski or Board Instructor Level 1 and Avalanche Safety Training Level 1, and there are opportunities for additional 1st aid and Mt. Bike instructor's certifications.

Classroom learning activities will support on-slope instruction, and will include designing and implementing training programs, equipment maintenance and repair, wilderness rescue, investigating career options in the sports industry and include guest speakers from a variety of professions.

The knowledge, skills, experience, relationships and certifications gained through this program will prepare students for many job and career opportunities in the mountain sports industry, while students have fun as they learn together on the slopes and trails.

Mission statement

The Sea to Sky Ski, Snowboard & Bike Academy will focus on personal growth in student's athletic performance, leadership abilities, community involvement, social awareness, career options, academics and global citizenship. Student learning will focus on SD48's five competencies, using the project based learning model and incorporating the six pathways to student achievement.

Estimated Cost based on 2016 prices\$ 1700 (If students have a ski pass the cost is \$1500) Scholarships and Bursaries are available see Mr. Treadway.

Academies at Whistler Secondary (have extra fees)

Academies
<p>Hockey Academy 8/9/10/11/12 (could happen in either or both semesters, 4 credits)</p> <p>Application and extra fees apply. Students learn sport specific training for hockey and power skating, puck skills and tactical game play. Open to all levels and abilities.</p>
<p>Soccer Academy 8/9/10/11/12 (first semester or yearlong students only, 4 credits)</p> <p>Soccer Academy</p> <p>The Soccer Academy is a Program of Choice that is integrated into the student's current school timetable. A specialist teacher and professionally licensed coaches work closely with students to provide a holistic learning experience. In addition to a balance of sport-specific training and conditioning, the content covers nutrition, sports psychology, tactical awareness, leadership and social responsibility. As a student in Soccer Academy, you will be expected to take ownership of your personal development, while fitting into a unique team of peers.</p>

Pemberton Secondary's Course Selection Process

- Teacher presentations by grades
- Talk to family and guardians
- Course Selection by students on the computer determines which courses are run
- Timetable building by school administration
- Second round of course selections by students completed on paper copy of proposed course timetable
- If you have any concerns please book an appointment with Heather Quamme at 604-894-6318 or hquamme@sd48.bc.ca