ABBOTSFORD SENIOR SECONDARY



Course Planning Guide

2021 - 2022

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LANGUAGE ARTS

Language Arts Quick Reference:

English 9 Pre-Diploma English 9 English 10 Composition & Literature English 10 New Media & Spoken Language English 11 – New Media

Pre-Diploma English 10

English 11 - Composition Enalish 11 – Literary Studies English 11 – Spoken Language **IB English 11 HL**

English Studies 12 English First Peoples 12 IB English 12 HL Creative Writing 12

Enalish 9

This course includes elements of fiction and nonfiction taught through short stories and novels. Writing skills and paragraph writing will also be taught. Public speaking may be covered in class. English 9 also covers elements of poetry and drama. Various poems and one Shakespeare drama will be taught. Writing and editing skills will be taught in conjunction with literature.

Pre-Diploma Enalish 9

Prerequisite: English 8 with a letter grade of A or B Course content is drawn from English 9 and will offer extended and enriched opportunities to explore curriculum in more depth.

English 10 Composition and Literary Studies

The course will include the elements of fiction and non-fiction taught through short story, novel, poetry and drama. Various works will be taught, including a Shakespearean drama. Grammar, writing and editing skills will be taught in conjunction with literature. If times allows public speaking and/or debating may be included.

Pre-Diploma Enalish 10

In this course, students will meet the goals required for the regular English 10 course through various genres short story, novel, poetry, drama, and essay. At least one work of Shakespeare will be studied. Students will encounter works from literary cultures throughout the world. They will be challenged to respond in a variety of ways to more complex works than those in the regular course.

English 10 New Media and Spoken Language

This is a new English course offering that continues to develop skills introduced in English 9. Students will continue to develop reading strategies, writing processes, oral language strategies, story, identity, perspective, language, and culture studies through a digital lens with a focus on language and voice. Students will learn through a variety of formats that may include text, film, print media, and group discussions. This course is designed for students who enjoy learning English through active participation, movement, and dialogue.

English 11 - Composition

Composition 11 will support students as they refine, clarify, and adjust their written communication through practice and revision. Students will read and study work from various authors and styles for the development of their writing. Students will gain confidence as they develop their writing craft.

Enalish 11 – Literary Studies

Literary Studies 11 allows students to delve deeply into literature. Students can explore specific themes, periods, authors, or areas of the world through literary works (fiction and non-fiction). Students will increase their literacy skills through close reading of challenging texts, while expanding their understanding of themselves and world. Students will further develop higher-level thinking and learning skills, as well as exploring their roles as educated global citizens.



<u>English 11 – Spoken Language</u>

Spoken Language 11 supports students as they refine, clarify, and adjust their spoken communication through practice and revision. This course provides opportunities to study, create, write, and present original pieces for a range of purposed and real-world audiences. Possible focus areas include poetry, oral storytelling, readers' theatre, radio or video podcasts, speech writing and presenting, voice-overs.

English 11 – New Media

New Media 11 focuses on digital literacy using media, such as film studies, journalism, publishing and digital communication. This course is designed with the flexibility to develop an area of study based on students; interest, needs and abilities. Coursework will provide students with skills vital for success in an increasingly complex digital world. Possible focus areas: globalization of media industry or the changing roles and structures within news organizations or writing for the web, social media, gaming or podcasting.

English Studies 12

Prerequisite: English 11

Students will study elements of prose and poetry and review basic writing skills. Students will develop an appreciation of valid ways of interpreting literature and will come to recognize and use literacy devices. Students will learn to recognize, understand and use descriptive, narrative, and expository modes of writing. Assignments will include paragraph and multiparagraph compositions. Works studied include short stories, novels, poetry, drama, and at least one Shakespeare play.

English First Peoples 12

EFP 12 is designed for all students who are interested in experiencing First Peoples oral and written literature and visual texts in a range of media. The course focuses on the experiences, values, beliefs, and lived realities of First Peoples through oral story, poetry, song, performance, film, and prose. Students will examine various means of communication and will gain insight and understanding of themselves and others in a changing world. While the focus in EFP 12 is primarily on First Peoples voices from British Columbia, students also engage with texts that reflect First Peoples perspectives from elsewhere in Canada and throughout the world.

*English Studies 12 <u>OR</u> English First Peoples 12 is required for graduation.

IB English 11 & 12 - Higher Level

The IB English 11/12 HL course is a two-year commitment that covers multiple works, ranging from works in translation, prose, poetry, and drama. Works come from around the world and range from the 16th century to present. Students will have to complete assessments marked externally and internally, as well as keep an ongoing portfolio of developing work. Students will write two exams at the end of the course (May of grade 12), which will account for 45% of their final grade. Please see the school's website for more information on the IB Programme.

Creative Writing 12

Do you want spend school hours working on your writing craft? Take Writing 12!

It is an elective course which is open to all students, who have completed grade 10 English and have a flair for written expression. Through the process of storytelling and journalism, students will develop a better understanding of identity and the world around them. On top of this students will gain confidence in themselves. Each student will enter at least one writing contest and publish at least one of their creations. In this way the student will learn about the world of publishing and how to become part of it.

MODERN LANGUAGES

Modern Languages Quick Reference:

Pre-Diploma French 9
Pre-Diploma French 10
IB French (SL) YR 1
IB French (SL) YR 2

French 9

Prerequisite: French 8 or teacher's permission This course builds upon the knowledge and skills that the students had previously acquired in French 8. In this course, the emphasis is placed on increasing the students" vocabulary as well as oral and written skills via exposure to a variety of French media, computer software, and the Internet. Units covered are related to the individual, friends, city/country life, transportation, cultural exchanges, school life, fashion, food and French-speaking regions outside of Quebec. Assessment is based on oral communication, visual interpretation, reading comprehension, and written production.

Pre-Diploma French 9

Prerequisite: French 8 or teacher's permission Pre-Diploma French 9 has been designed to serve as the prerequisite for entry into the International Baccalaureate French programme in grade 11 (IB YR1). In addition to the thematic and language contents of the French 9 program, this course includes elements of experiences, identities, human ingenuity, social organization, and sharing the planet, at the level of a preliminary IB course.

French 10

Prerequisite: French 9 or teacher's permission Students continue to develop oral and written skills based upon topics that are relevant to real-life situations. The program relies upon library materials, projects, websites, and authentic French resources such as French music, magazines, cartoons, commercials, television shows, and newspapers. Units covered are related to leisure activities, travel, weather, health issues, careers, the environment, and Quebec. Assessment is based on oral communications, visual interpretation, reading comprehension, and written production abilities. Introductory Punjabi 11

IB French (Ab initio) YR 1 IB French (Ab initio) YR 2

Pre-Diploma French 10

Prerequisite: Pre-Diploma French 9 / French 9 or teacher's permission

Pre-Diploma French 10 has been designed to serve as the prerequisite for entry into the International Baccalaureate French program in grade 11 (IB YR 1). In addition to the thematic and language content of the French 10 program, this course includes elements of experiences, identities, human ingenuity, social organization, and sharing the planet, at the level of an introductory IB course.



French 11

Prerequisite: French 10 or teacher's permission Students become more adept at expressing themselves and their ideas both orally and in writing. This is achieved through a variety of personalized activities and dialogues, library projects, the Internet, and other French media such as videos, cds, dvds, music, which are used to promote the awareness of French culture throughout the world. Units covered are related to childhood, physical activities, relationships, media, the future, travel, the environment, and the Francophone world. Assessment is based on oral communication, visual interpretation, reading comprehension, and written production abilities. Students will be working toward achieving the equivalent level of DELF A2.

French 12

Prerequisite: French 11 or teacher's permission This course is designed to extend students' reading, writing, listening, visuacy, and speaking skills. The students will attain greater fluency by participating in debates, creating dialogues and group skits, as well as reading Francophone magazines and extracts from literature. Students' ability to express opinions on a wider variety of topics, including the controversial, will be highlighted. Themes covered may include: relationships, world issues, advertising, travel, health, customs and traditions, and crime. Assessment is based on oral communication, visual interpretation, reading comprehension, and written production abilities. Students will be working toward achieving the equivalent level of DELF A2/B1.IB

Introductory Punjabi 11

This course will introduce students to the Punjabi alphabet, vowel symbols, basic grammar and reading. By the end of the course students should be able to read, write and speak simple Punjabi sentences. There will also be projects to extend students' knowledge of Punjabi culture, traditions and history.

IB DP French Years 1 & 2 Standard/Ab initio

IB French YR 1 Prerequisite: Pre-Diploma French 10, French 10 or teacher's permission IB French YR 2 Prerequisite: IB YR 1 French or teacher's permission

IB French provides a greater challenge to the student by focusing upon more intense, in-depth work in the language. Students are exposed to ways of thought, which differ from their own and develop the skills to more fluently express their own thoughts and beliefs. Intercultural understanding, internationalism, and integration of other subject material are key concepts addressed in this programme. The five course themes are experiences, identities, human ingenuity, social organization, and sharing the planet. Assessment in IB YR 1 and in IB YR 2 is connected to oral communication, visual interpretation, reading comprehension, and written production abilities which are demonstrated both individually and via group work as well as via the IB YR 2 internal assessments and the IB YR 2 exams in May.

SOCIAL STUDIES

Social Studies Quick Reference:

Social Studies 9 Pre-Diploma Social Studies 9 Social Studies 10 Pre-Diploma Social Studies 10 IB History (HL) Year 1 IB History (HL) Year 2 SS11 Explorations in History Francophone History & Culture 11

IB Theory of Knowledge Yr 1 & 2

BC First Peoples 12 Law 12 20th Century History 12 Social Justice 12 Comparative World Religions 12

Social Studies 9

Prerequisite: Social Studies 8

Through the skills of the core competencies, students study the big ideas of revolution, colonialism and imperialism in the development of modern nation-states, including Canada. Connections are made between world events from 1750 to 1914. Social Studies skills such as inquiry, research, making reasoned ethical judgments, analysis of perspectives and significance of key events are developed through an exploration of the historic and geographic content.

Social Studies 10

Prerequisite: Social Studies 9

This course focuses on the years of 1914 to present. This course builds the student's competency in effective inquiry skills, assessment of significance, justification of evidence, assessment of causes and consequences, ethical judgement, explaining perspectives and other skill-based competencies. Topics include government and politics, policies, Canadian autonomy, Canadian identities, discriminatory policies and injustices, advocacy for human rights, domestic conflict and international conflict.

Social Studies 11 – Explorations in History

Prerequisite: Social Studies 10

Journalists report on day-to-day events in crises throughout the world, but have you ever wondered about the background of world events? Here is your opportunity to understand the how and why of our world. History 12 is an academic course, focusing on 20th century World History. Students are assessed on assignments, projects, quizzes, and unit tests.

BC First Peoples Studies 12

Recognized by UVIC and SFU.

BC First Peoples 12 looks at how the identities, worldviews, and language of BC First Peoples 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 BC First Peoples. Students will study how cultural expressions convey the richness, diversity, and resiliency of BC First Peoples. Student will gain an understanding of how through self-governance, leadership, and self-determination, BC First Peoples challenge and resist Canada's ongoing colonialism. Students are assessed on assignments, projects, quizzes and unit tests.

Law Studies 12

Recognized by all BC universities.

Students study Canada's legal system, how laws are created, changed, and enforced by police, courts, and correctional prisons, and gaining awareness of Canadian constitutional (legal) rights. The first half of this course focuses on constitutional and human rights laws, criminal law, including the rules of evidence gathering and the accused's rights. The second half of this course focuses on trial procedures (prosecution (Law 12 continued) and defense), negligence and civil torts (suing someone), marriage and divorce law. As well, field trips and guest speakers may be offered to give students insight into the court system and professions in law. Students are assessed on assignments, projects, quizzes, and unit tests.



20th Century World History 12

Recognized by all BC universities.

20th Century World History looks at how nationalist movements can unite people in common causes or lead to intense conflicts between different groups. Students will investigate and understand how the rapid development and proliferation of technology in the 20th century led to profound social, economic, and political changes around the world. Students will assess the breakdown of longstanding empires and examine new economic and political systems. Students begin the course by looking at the era of colonization, followed by decolonization and finally current conflicts and problems linked to past events. Students will have various opportunities to engage in groups, attend field trips and listen to guest speakers. Students will be assessed on assignments, projects, quizzes and unit tests.

Social Justice 12

Recognized by all BC universities except UBC Vancouver. Does poverty determine social status? Should we fight for equality or equity? Social Justice 12 provides students with the opportunity to become more aware and analyze a variety of social injustices in the world such as poverty, aboriginal peoples and the law, climate change, women's rights and globalization. This course challenges students to examine their own beliefs and values and realize their capacity to affect positive change in the world. This course is project-based.

Francophone History and Culture 11

Pre-requisite: Social Studies 10

Our primary objective is to understand the Francophone identity within and outside of Canada, in order that we become active, informed citizens, who can think critically, understand, and explain the perspectives of others, while doing so in an articulate, effective manner. Via the six curricular competencies: significance, evidence, continuity and change, cause and consequence, perspective, and ethical judgment, we will traverse the planet, in search of Francophone communities, so that we can answer the guiding question, "What does it mean to be Francophone vis-àvis the local, provincial, national, and international communities?" This course will be taught in English.

Comparative World Reliaions 12

World Religions is not a course about being religious; it is an opportunity to investigate some of the belief systems humans have created to make sense of the world. Religions around the world have shaped the political, social, and cultural life of societies. This course focuses on the major religions that have played a role in recent human history: Buddhism, Hinduism, Christianity, Islam, Judaism and Confucianism, as well as Sikhism and Spirituality of Indigenous Peoples. Students will trace the major developments in these religions and explore their relationships with social institutions, culture and how religion helps shape identity. The course will also address some of the similarities and differences among

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the major religions and examine the connections and influences they have both in the past and during present times.

IB History 11 & 12 (HigherLevel)

Pre-requisite: Social Studies 10 PD or permission of the teacher

This 2-year course challenges the idea that history is just a bunch of dry facts. The themes of study are:

- 1. Causes, Practices and Effects of War For example: WWI, WWII
- Origins and Development of Authoritarian and Single Party States
 For example: Lenin and Stalin's Russia, Mussolini's Italy, Hitler's Germany
- 3. The Cold War For example: Nuclear Arms Race, Cuban Missile Crisis, Vietnam War

Through an in-depth examination of these 20th Century topics, students develop an understanding of the relationship between the past and our current world. Students learn about the origin and purpose as well as the value and limitation of historical evidence. Students are taught to write evidencebased essays in which they analyze the various interpretations of history.

Graduates of IB History 12 will receive credit for IB History 11 and IB History 12. Students who are awarded a 5 or better by the International Baccalaureate Examinations Office may receive advanced placement in History at many universities. This mark would also count towards the \$1,000 provincial scholarship.

Successful completion of IB History will satisfy the Ministry of Educations" Social Studies 11 graduation requirement.

IB Theory of Knowledge 11

Recommended Prerequisite: an inquiring mind Theory of Knowledge (TOK), while a requirement for IB Diploma Candidates, is open to all students who are interested in thinking critically about what they know. Students explore, the role of language, emotion, perception, and reason in the acquisition of knowledge. The relationship between the knower (you) and knowledge and information is another key part of the course. This is an intellectually challenging course that will require serious contemplation on your part.

IB Theory of Knowledge 12

Recommended Prerequisite: TOK 11, or permission of instructor

The second installment of TOK comes in the grade 12 year and, again, challenges students to extend their thinking about the subjects they have been studying during their high school experience. This part of the course looks at six areas of knowledge: History, Mathematics, Natural Sciences, Human Sciences, Arts and Esthetics, and Ethics. We will continue to discuss the relationship between the knower and knowledge. This completes the IB Theory of Knowledge and is a requirement for all Diploma Candidates.



MATHEMATICS PATHWAYS IN MATHEMATICS

Sample Post-Secondary Options



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In deciding on an appropriate pathway, students should take into account any long-term career plans and the academic qualifications needed. As well, student should select courses that are appropriate for their current level of aptitude in mathematics. The members of the mathematics department are always ready to advise students on course selection.

Design of Pathways

Each pathway is designed to provide students with the mathematical understandings, rigor and criticalthinking skills that have been identified for specific post-secondary programs of study and for direct entry into the work force

Mathematics 9

Successful completion of Math 8 is expected before enrolling in this course. Numeracy, patterns, geometry, measurements and analysis will allow learners to inquire, draw conclusions and make predictions.

Pre-Diploma Mathematics 9 & 10

This course covers the same outcomes as Mathematics 9/10 with increased emphasis on student explorations. Each student will be expected to complete a research exploration paper, which will include writing an essay response to the task. Enrollment in this course requires teacher recommendation and a Mathematic Aptitude assessment.

Workplace Mathematics 10 and 11

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into the majority of trades and for direct entry into the work force.

Foundations of Mathematics 10 11 & 12

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

*See Pathways diagram for pre-requisite information

Pre-calculus 11 & 12

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus.

<u>Calculus 12</u>

Calculus 12 is HIGHLY recommended for any student that will need to study Calculus in college or university. This usually includes any student enrolling in Finance, Business, Mathematics, Engineering, Sciences, Medicine, Architecture, Design, or Geography. Be sure to check with Mrs. Doan to verify your needs. If you take Calculus 12 you MUST also be enrolled in Pre-Calculus 12 or have successfully completed Pre-Calculus 12.

Statistics 12

This course is highly recommended for any student that will be heading to college or university. Most programs of study include some coursework in Statistics. Completing this course in high school will better prepare you for the material you will face at postsecondary. Be sure to check with Mrs. Doan to verify your needs. Prerequisite for this course is Pre-Calculus 11 and/or Foundations of Math 11 with a mark of C+ or better.

IB Mathematics Standard Level Year 1 & 2

Prerequisite: Foundations of Math 10 PD and teacher recommendation.

IB Math is a two-year program, beginning in Grade 11 and finishing in Grade 12. Any student considering post-secondary study in Finance, Business, Mathematics, Engineering, Sciences and Medicine is highly recommended to complete this two-year course. The course will complete all requirements of Pre-Calculus 11 & 12, much of Foundations of Mathematics 11 & 12 as well as Calculus 12. University credit may be earned for this course based on your overall performance.

SCIENCE

Science 9 Pre-Diploma Science 9 Science 10 Pre-Diploma Science 10 Life Sciences 11 Chemistry 11 Physics 11 Earth Science 11 Environmental Science 11 IB Biology 11 SL IB Physics 11 SL IB Chemistry 11 HL Anatomy & Physiology 12 Chemistry 12 Physics 12 Geology 12 Science 12 IB Biology 12 SL IB Physics 12 SL IB Chemistry 12 HL Psychology 12

<u>Science 9</u>

<u>Chemistry 9</u> consists of general lab safety, household and WHMIS safety symbols. Chemistry 9 extends students' knowledge of modern atomic theory, including Bohr's electron arrangements. Students will use the Periodic Table and its chemical symbols to write chemical formulae of compounds and differentiate between lonic and Covalent bonding.

<u>Biology 9</u> focuses on cell theory: the cell and its organelles. Students will study the nucleus and the role that DNA plays in cellular division. Students will be able to differentiate between Mitosis and Meiosis and explain their roles in sexual and asexual reproduction.

<u>Ecology 9</u> examines nutrient cycles and their interconnectedness. The relationship between solar radiation, the cycles of matter and the Pyramid of Energy will be discussed. A focus will be placed on sustainability, as students will see that all matter is interconnected, and how humans influence our Earth. Students will be introduced to the First Nations Peoples' principles of interconnectedness. <u>Physics 9</u> includes a laboratory study of current electricity and circuits. Topics include voltage, current, and resistance, and how they are related to Ohm's Law., and how they apply to series and parallel circuits.

The course will conclude with a final summative assessment worth 20% of the grade.

<u> Pre-Diploma Science 9</u>

This curriculum parallels the Science 9 program but offers extended and enriched opportunities to explore the curriculum more in depth. An emphasis will be placed on critical thinking skills. The course will conclude with a final summative assessment worth 20% of the final grade.

<u>Science 10</u>

<u>Biology 10</u> students learn about DNA structure, DNA mutations, genetics and evolution, while addressing the big idea that genes are the foundation for the diversity of living things.

<u>Chemistry 10</u> students expand on the basic ideas learned in grade 8 and 9 and apply their Science 9 knowledge to chemical equations and chemical reactions. The big idea for Chemistry is that chemical processes require energy change as atoms are rearranged.

<u>Physics 10</u> The focus will be on the big idea of how energy is conserved, and its transformation can affect living things and the environment. <u>Astronomy 10</u> Focuses on the big idea of how the formation of the universe can be explained by the Big Bang Theory.

Pre-Diploma Science 10

Prerequisite: Science 9 with a letter grade of A or Science 9 PD with a letter grade of A or B. Science 10 PD completes the three-year junior science program.

This curriculum parallels the Science 10 program but offers extended and enriched opportunities to explore the curriculum more in depth. An emphasis will be placed on critical thinking skills.

Environmental Science 11

In this course students will gain a deeper understanding of the connection between humans and the environment. You will learn about the importance of ecosystem diversity and the relationship between living and nonliving things. Students will dive deep into specific local and global environmental issues, focusing on ecosystem sustainability and the role humans play in restoration and stewardship.

<u>Earth Science 11</u>

An overview of Earth Science, this course is a blend of many disciplines and how they relate to our planet. Student choosing this course are asked to recognize that this course is academic in nature. It is not a modified science course.

Earth Science deals with the structure and dynamics of the earth, and involves the systematic study of geology, oceanography, plate tectonics, astronomy and meteorology. Topics include the study of the earth's surface and interior, oceans and currents, earth, sun, plants and the atmosphere and weather.

<u>Geology 12</u>

What did the Gabbro say to the Geologist? Don't take me for Granite.

If you don't get the joke, this course will help. Geology 12 studies the structure of the Earth, its materials (rocks and Minerals), and the processes involved in changing the surface of the Earth including plate tectonics (seismology and volcanism), weathering (physical and chemical), and erosion (by wind, water and glaciers). Students will become more aware of Earth's renewable and non-renewable resources and the methods used to conserve and/or protect those resources. Sustainable practices will also be covered.

There will be an introduction to specific examples of Geologic Energy Resources (oil, coal, natural gas): their significance, location, extraction and use. Students will use their acquired knowledge from this course to explain and provide physical examples of how Abbotsford Senior Secondary School campus is a "building that teacher" and uses "Tomorrow's Sustainable Solutions Today."



Life Sciences 11

Prerequisite: C+ in Science 10

Students will study how Life is a result of interactions at the molecular and cellular levels. Students will learn about the scientific method and how it applies to development of theories in science. Students will learn about Evolution as an important theory in Biology resulting in formation of new species. Students will learn why Scientists classify Organisms based on common characteristics and the study of comparative biochemistry. Additionally, they will study methods and principles of biology and microbiology. Study the different groups of invertebrates and how they relate to the environment.

IB Biology-Standard Level Year 1

Prerequisite: A in SC10 or B in SC10H Students will study the ecology and evolution of species, communities and ecosystems. Human impact, biodiversity and conservation will be included. Students will study the structure and function of the cell, and the biochemical principles that govern function. Human anatomy and physiology will include digestive, urinary and nervous systems. University credit may be earned for this course with a final mark of 5,6,or 7 in year 2.

Anatomy & Physiology 12

Prerequisite: B in Biology 11 or B in Chemistry 11/Physics 11 or teacher permission. Students will Study how Homeostasis is maintained through physiological processes. Students will study Gene expression, through protein synthesis, and learn it involves an

interaction between genes and the environment. Students will study Organ systems and learn about the complex interrelationships required to maintain homeostasis.

IB Biology – Standard Level Year 2

Prerequisite: IB Biology Standard Year 1 Students will finish human physiology with the circulatory, respiratory, and reproductive systems. Students will also study theoretical and applied genetics, cellular respiration, photo-synthesis, diet and nutrition. University credit may be earned for this course with a final mark of 5, 6, or 7 in year 2.

<u>Chemistry 11</u>

In Chemistry 11, students will study lab safety, the quantum mechanical model, electron configuration, and bonding/forces. Students will also become familiar with some applications of organic chemistry, the mole, dimensional analysis, stoichiometry, solubility, green chemistry, and a variety of different chemical analysis techniques.

The course will conclude with a final summative assessment worth 20% of the grade.

<u> IB Chemistry - Higher Level Year 1</u>

Prerequisite: B in PD Science 10 and PD Math 10 The course is designed for students in the I.B. program. It is particularly useful for students entering into the faculties of Science and Engineering. Topics to be studied include: measurement, matter, chemical equations stoichiometry, gas laws, thermodynamics, structure of the atom, and organic chemistry. This course is much more difficult than Chemistry 11. University credit may be earned for this course with a final mark of 5,6,or 7 in year 2.

Chemistry 12

Prerequisite: B in Chem 11 Students will study rates of chemical reactions, equilibrium, mathematical applications of K, solubility, and solubility equilibrium. Students will study Arrhenius theory, Bronsted Lowry theory, pH, hydrolysis, indicators, titrations, and buffers. Students will study half reactions, balancing redox equations, redox titrations, electrochemical cells and electrolytic cells.



IB Chemistry - HL Year 2

Prerequisite: I.B. Chemistry H.L., Year 1 Topics to be studied include: Kinetics, Equilibrium, Solubility, Acid Base, Electrochemistry, Thermodynamics, and Organic Chemistry. The course includes many lab activities as well as a group IV project. The final mark is calculated as follows: 24% from classroom practical work and 76% based on the final I.B. exams in May of Grade 12. University credit may be earned for this course with a final mark of 5,6, or 7 in year 2.

Physics 11

Prerequisite: B in Science 10 and C+ in Math 10 Physics 11 is recommended for all students who wish to pursue academic studies or career training in trades, technologic, scientific, and medical fields. The course includes hands on activities and labs. Physics strives to understand the natural world through the study of kinematics (motion), dynamics (forces), thermal energy, nuclear and quantum physics and wave motion. Physics 11 is a challenging and rewarding course that will increase your understanding of the world around you.

Psychology 12

This course introduces students to the study of human behavior and mental processes. Topics include the history of psychology and its current perspectives,

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research methods, biological bases of behavior (neuroscience & genetics), states of consciousness, human development over the lifespan, and sensation & perception.

IB Physics - Standard Level Year 1

Prerequisite: B in PD Science 10 &PD Math 10 IB physics covers a much broader range of topics than physics 11 and is an extremely useful university prep course. A greater emphasis is placed on hands on activities and lab work, totaling a minimum of 40 hours, as well as measurement and uncertainties leading to excellent skills to face university lab expectations. Students who take IB Physics year 1 can choose to continue to Physics 12 or IB Year 2. University credit may be earned for this course with a final mark of 5,6, or 7 in year 2.

Physics 12

Prerequisite: B in Physics 11 and B in Math 11. Physics 12 is recommended for any students with interest in physics or who plan to continue in science and/or engineering. Physics 12 further develops the topics of physics 11 by expanding to 2- dimensions using vector analysis as well as introducing equilibrium, gravitation, electricity and magnetism. This is a very challenging course, and knowledge of math is a great asset.

IB Physics - SL Year 2

Prerequisite: I.B. Physics H.L. Year 1 This course is a continuation of IB Physics year 1. Topics to be studied include: electromagnetism, digital technology, quantum physics, nuclear Physics, and climate change. In addition, students' study two options which may include: medical physics, astrophysics, relativity, and particle physics. This course includes many lab activities as well as a group IV project. The final mark is calculated as follows: 24% from classroom practical work and 76% based on the final IB exams in May. This course ends in May and students may earn university credits with a final mark of 5, 6, or 7 in year 2.

<u>Science 12</u>

Science 12 counts as your "Science 11 or 12" graduation requirement. This course will cover any three (or more) different topics from any of the grade 11 or 12 science courses: Life Sciences, Anatomy, Chemistry, Physics, Earth Science, or Environmental Sciences. The course is flexible in both the choice of topic and the depth of inquiry into each topic. This course is for those who would like a more general science experience without choosing a specific discipline.

VISUAL & PERFORMING ARTS

Visual & Performing Arts Quick Reference:

Fine Arts 9	Drama 9
Fine Arts 10	Drama 10
Studio Arts Drawing & Painting 11&12	Drama 11
Studio Arts Ceramics & Sculpture 11&12	Drama 12
IB Visual Art Yr.1 & Yr. 2	
Art Activism 10, 11 & 12	

<u>Fine Arts 9</u>

Art 9 is designed to familiarize the students to the Elements and Principles of Design through the use of learning art terms and vocabulary as well as through project work to put the concepts to practice. Some of the projects produced in Art 9 are paper macher sculptures, scratch board drawings, clay sculptures, block printing, optical illusions and acrylic paintings. Students will also learn the purpose of keeping a sketchbook and experiment with different drawing strategies.

Fine Arts 10

Art 10 is designed to offer more in-depth work with the concepts and media covered in Art 9. This course will also accommodate those who have not taken Art 9. Projects focusing on the Elements and Principles of Design will continue to be a major part of the course material. Projects include studying various drawing materials, using acrylic paints and watercolors, paper sculpting and marbling, stenciling, simple silkscreen techniques, clay sculpture, and printmaking units be included. Sketchbook assignments will encourage students to develop drawing skills.

Art Activism 10. 11. 12

Art activists works to change the world around them through their art. In this course, students will explore a local social issue and work to create change through art. Each year students will be presented with a new topic, study it, hear peoples' stories regarding it, and create a large-scale art piece that will be used to exhibit to raise awareness and possibly sell in order to raise money for a specific cause. This course will develop and hone artistic skills while learning about key local issues. If a student takes Art Activism at different several grade levels they will work on refining their skill set (Curricular Competencies) while learning about different issues. Topics change yearly, and depth of skills and techniques grow with students; essential art content does not change.

Concert Band 9/10 Concert Band 11/12 Jr. Jazz Band 9/10 Sr. Jazz Band 11/12 Drumline 9-12 -Beginner & Advanced

Studio Art Drawina and Paintina 11

Prerequisite: Art 9

In SADP11, students will work with various drawing medium: graphite, pencil crayon, conte, washes and pen and ink. The topics of creating compositions, drawing strategies will be covered along with developing their technical skills with the materials listed above. Further skills will include developing and adapting drawing and composition techniques for use in printmaking images and techniques. In the painting section of the course, students will have opportunities to explore the further use of tempera, large-scale watercolours, acrylics and oil paints. Study of techniques, tools, processes, vocabulary and history will be covered. The students will complete two-dimensional projects as well as sketchbook work.

Studio Art Drawing and Painting 12

Prerequisite: SADP11, IBArt11 or 12 (12 can be concurrent)

SADP12 offers advanced drawing and painting exploration. In drawing, the students will learn to develop skills in technique and imagery, focus on developing and exploring ideas, presentation and working independently. Also, there will be focus placed on developing drawing and illustration skills to be used in various fields of art careers (illustration, designing, technical drawing and commercial art.) Advanced painting will focus on continuing independent exploration of painting medium using the skills and materials studied in SADP 11. Use of mixed media, researching advanced painting strategies and image development are also emphasized in this course. Previous experience in Studio Art- Drawing and Painting 11 is highly recommended.

Studio Art Ceramics and Sculpture 11

Prerequisite: Art 9, IBArt11, 12 or SADP11, 12 (these can be concurrent)

This course emphasizes the creation and construction of three-dimensional forms of art. It will cover the use of a wide range of sculpting materials: clay, wood, metal, plaster, fabric and wire. The focus of the course is to allow students to experience and explore a variety of sculpting techniques and styles. The clay units consist of working with various types of clays for hand building methods, sculpting large-scale figures, glazing and firing. Plasterwork, paper machier, mask making and assemblage are also units that are studied in this course.

Studio Art Ceramics and Sculpture 12

Prerequisite: SACS11, SADP11, 12, IBArt12 (can be concurrent)

This is an advanced course for students who wish further study in clay, mixed media/assemblage and sculpting. Students are encouraged to research advanced process, techniques, and skills using the materials learned in SACS 11. Working independently and developing individual styles of imagery and ideas are also stressed in this course. Previous experience in Studio Art-Ceramics and Sculpture 11 is highly recommended.

IB Art/Visual Arts HL

Prerequisite: Art9, SADP 11, SACS11 (can be concurrent)

IB Art is for students who are very interested in art and wish to study it in-depth with an academic focus. There is a strong emphasis on written research and finished studio pieces. The studio work from this course will be work that is developed from the students" written research into areas and topics such as art history, art of other cultures, art as commentary on social issues, contemporary art and artists, and art as personal development.

Students are expected to have a good understanding of art techniques and a strong desire to research, read and write about art and issues and how they relate to art. Students who select this course should also demonstrate self- direction, good time management skills, and a willingness to "think outside the box" and be adaptive, innovative and flexible in regards to working with art materials and ways of approaching the research for this course.

Drama 9 and 10

Drama is an interactive, creative process involving each individual in relationship to others and the environment. It's also lots of fun. Students will develop various acting skills and techniques such as characterization, movement, voice and improvisation. These skills will be taught through a combination of theatre games, mime, role-play, tableaux, monologue and scene work. Students will be required to create their own scripts and use prepared materials. Drama 10 is a participationbased course. Participation and good attendance is mandatory. Marks are largely awarded on work done during class time, but some performance outside of class will also be required.

<u>Drama 11</u>

The student who takes this course will be introduced to the basics and fundamentals of theatre acting. During the first few weeks of the course, games and theatre sport activities will be used to help make the actor feel comfortable and relaxed while on the stage. Other activities to assist the student to be involved and to explore acting include mask work, play building, acting exercises, and commercials. The final emphasis of the course is on a short-scripted scene with some simple exploration in lighting, sound, design of set and costume. Students will also learn how to audition for stage plays, movies and for agents.

<u>Drama 12</u>

Prerequisite: TPA 11 or Instructor's permission The student will focus on what they have learned in Theatre Performance 11 and then improving these skills by doing more scene work. The student will explore many different styles of acting, from comedy such as "Commedia del Arte", to dramas such as scenes from current movies. Each student will get the opportunity to create a light or sound plot for another student's scene, then put into practice what they have created. It is expected that each scene be performed in front of an audience. All of the students will get the opportunity to prepare at least one audition piece. Students will also get the opportunity to talk with professional actors, directors, writers, and agents either here or in Vancouver.

<u>Dance 9 & 10</u>

This is a performance-based course for students interested in investigating different styles of dance. This course will help students gain flexibility, coordination, strength and creativity. Previous dance training is welcome, but not required. Students must be willing to explore a variety of dance styles, and GUYS are welcome too! Students will be introduced to the elements of movement, choreography and basic techniques including, but not limited to, jazz, ballet, tap, yoga and contemporary modern dance. Conscious of the creative process, students learn to apply principles of movement, design and choreographic forms and genres in their own choreography assignments. Excellent attendance and a PE/ dance strip are required. Also take note that attendance at all performances and rehearsals is mandatory and will be strictly enforced.

<u> Dance 11 & 12</u>

Prerequisite: Dance 9/10 or instructor's permission This is a performance-based course for students interested in investigating different styles of dance. In this course, students will increase flexibility, coordination, strength and creativity by thinking, moving and engaging in topic related discussions. Some previous training is welcome, but not required. Students must be open to exploring a variety of dance styles. GUYS are welcome too! Students develop the elements of movement, choreography and basic techniques in areas including, but not limited to, jazz, ballet, tap, yoga, and contemporary modern dance. Conscious of the creative process, students learn to apply principles of movement, design and choreographic forms and genres in their own choreography assignments. Excellent attendance and a PE/ dance strip are required. Also take note that attendance at all performances and rehearsals is mandatory and will be strictly enforced.

<u>Band 9</u>

Prerequisite: **Students must be able to read music.** The main emphasis of Band 9 is to provide students with the opportunity to improve his/her technical skills and musical abilities. This is a two-year course, combined with Band 10. Music to be performed will be chosen from a variety of styles and genres. As well as improving technical skills, students will be expected to study and gain a general understanding of music fundamentals such as key and time signatures, terminology, major and minor scales. Activities include 3-4 concerts a year, and music tour opportunities. Please note that his course includes commitments that fall outside of the school schedule. Attendance at all performances and rehearsals is mandatory.

Band 10 (Extended Day Course)

Prerequisite: Band 9 or 2-3 years of study on a concert band instrument or instructor's permission. **Students must be able to read music.**

The main emphasis of Band 10 is to provide students with the opportunity to improve his/her technical skills and musical abilities. This is a two- year course, combined with Band 9. Music to be performed will be chosen from a variety of styles and genres. As well as improving technical skills, students will be expected to study and gain a general understanding of music fundamentals such as key and time signatures, terminology, major and minor scales. Activities include 3-4 concerts a year, and music tour opportunities. Please note that his course includes commitments that fall outside of the school schedule. <u>Attendance at all performances and rehearsals is</u> <u>mandatory.</u>

Band 11& 12 (Extended Day Course)

Prerequisites: Band 9 or instructor's permission. Students must be able to read music.

The main emphasis of Concert Bands 11 & 12 is to prepare students for advanced musical repertoire. Music will be from a variety of styles and genres. As well as improving technical skills, students will be expected to study and gain an advanced understanding of music fundamentals such as key and time signatures, terminology, major, minor and chromatic scales. Activities include 3-4 concerts a year, and music tour opportunities. Please note that his course includes commitments that fall outside of the school schedule. <u>Attendance at all performances</u> <u>and rehearsals is mandatory.</u>

Beginner Drumline (Extended Day Course)

No previous music experience is required! Drumline is a marching drum corps ensemble. Students rehearse drum and cymbal rudiments and repertoire to perform with marching choreography. Beginner Drumline is a semester course intended to teach the fundamental skills required for the Senior Drumline. This is a beginner course and is open to any students in grades 9 – 12 without previous drumline experience. The course will teach music reading, theory, drum technique and marching. Please note that this is a performance-based course; therefore, <u>attendance at</u> <u>all performances and rehearsals is mandatory.</u>



Advanced Drumline (Extended Day Course)

Prerequisite: at least one year of band experience, or with teacher's permission.

Drumline is a marching drum corps ensemble. Students rehearse drum and cymbal rudiments and repertoire to perform with marching choreography. This course requires the most performance opportunities of any of our ensembles. Because of this, there is a strict attendance policy.

Junior Jazz Band (Extended Day Course)

Prerequisite: Band 8 or with instructor's permission Students must be able to read music. **Students must be enrolled in concert band to participate in this course, unless given teacher's permission.

This course is intended for students with no previous Jazz Band experience and is open to any student in grades 9 – 12. We will study the fundamentals of popular and dance genres including jazz, swing, rock, funk and Latin. Jazz band instrumentation includes trumpets, saxophones, trombones, guitar, bass guitar, drums and piano (minimum of RCM grade 5 or equivalent required for pianists). This course offers many performance opportunities throughout the year. Please note that this course includes commitments that fall outside of the school schedule. Jazz band is a performance-based course; Therefore, <u>attendance at all performances and rehearsals is</u> <u>mandatory.</u>

Senior Jazz Band: (Extended Day Course)

Prerequisites: At least 1 previous year of Jazz Band or with instructor's permission Students must be able to read music. **Students must be enrolled in concert band to participate in this course, or with teacher "s

permission. This course is open to advanced musicians with previous jazz band experience who wish to study popular and dance genres including jazz, swing, rock, funk and Latin. Jazz band instrumentation includes trumpets, saxophones, trombones, guitar, bass guitar, drums and piano (minimum of RCM grade 5 or equivalent required for pianists). This course offers many performance opportunities throughout the year, often more than the concert ensembles. Please note that this course includes commitments that fall outside of the school schedule. Jazz band is a performance-based course, therefore <u>attendance at</u> <u>all performances and rehearsals is mandatory.</u>



<u>Guitar 10 (Beginner)</u>

In this course you will learn basic guitar technique. Emphasis will be placed on proper hand positions and posture, correct finger picking technique, strumming, and basic chording. This course will focus on music reading (both rhythmic and melodic), basic chord progressions, playing as an ensemble as well as solo and small ensembles. A variety of different styles and time periods of music including folk, blues, classical, jazz and rock will be explored. Students will be required to perform for their teacher and their peers during class time. Students should also be prepared to put in extra practice on their own time.

Guitar 11 (Advanced)

In this course is an extension on the basic skills learned in Guitar 10. A variety of different styles and time periods of music including folk, blues, classical, jazz and rock will be explored. Strong emphasis will be on Ensemble playing in a classical setting. Music theory, sight reading, and ear training, rhythmic development, and performance etiquette are learning outcomes for this course. Solo work, large and small ensemble and accompanying are performance outcomes of this class. Prerequisite for this course is GUITAR 10 (BEGINNER) or in certain cases; previous guitar study. Students should also be prepared to put in extra practice on their own time

Concert Choir 9, 10, 11 & 12

No previous music experience is required!

Choir is open to all students who love to sing. Students will sing music from various classical and popular genres. Students will learn the fundamentals of voice technique, good tone production, harmonization, and music reading. This course offers many performance opportunities throughout the year. Please note that this course includes commitments that fall outside of the school schedule. Choir is a performance-based course; therefore, <u>attendance at all performances and rehearsals is</u> <u>mandatory.</u> Piano player with Royal Conservatory Gr. 8 or higher welcome to audition.



PHYSICAL EDUCATION

Physical Education Quick Reference:

Physical Health Education 9 Physical Health Education 10 Physical Education 11 Co-ed Physical Education 12 Co-ed Fitness & Conditioning 11 & 12 Superfit 11 & 12 Girls Outdoor Ed 11 & 12 Boys Outdoor Ed 11 & 12 Sport Medicine 11 Sport Academy (Soccer) 9-12 (PE and Fitness & Conditioning)

Nominal fees may be required to subsidize the cost of (optional) enriched activities within the PE curriculum. Suggested activities include: Bowling, Karate: Self-Defense, Guest Fitness Instruction, Swimming, Skating, Golf, Rock Climbing, Fitness Club Workouts (Great West Fitness Club), and Squash/Racquetball (VRC). Students who opt out of paying the fee will participate in a regular P.E. class with another instructor or complete theory assignments in order to meet the curricular requirements of the course.

Physical Health Education 9

PHE is designed to develop the knowledge, skills and understandings that students need for lifelong physical health and mental well-being. The curriculum highlights the connections between an individual's health and his or her well-being; the connections between physical and mental health; the importance of positive interpersonal relations; and how interactions with the community affect overall wellbeing.

Physical Education 10

This course includes indoor and outdoor team and individual games, fitness and recreational activities. There will also be components of active health and first-aid. The components of Active Health (fitness) will be developed and all students should receive instruction and possible certification in St John Lifesaver I (CPR) course.

Note: Skating (not including rental) and swimming costs will be provided by the school; however, nominal fees will be required for (optional) enriched activities including Bowling, Golf, field trips to private recreational facilities and/or specialized guest instruction.

Physical Education 11 Co-Ed

Prerequisite: Physical Education 10 This course allows students to pursue a variety of team and individual activities within the school and community. This course will include an introduction to golf, racquet sports, and self-defense skills in addition to skating and water sports. An introduction to the practical and theoretical components of outdoor education will also be included. Fitness, recreational and skill development components will be included throughout the course. Emphasis is on creating an atmosphere in which every student can participate freely, regardless of athletic ability. Note: Skating (not including rental) and swimming costs will be provided by the school however.

costs will be provided by the school, however, nominal fees will be required for (optional) enriched activities including Bowling, Golf, field trips to private recreational facilities and/or specialized guest instruction.

Physical Education 12 Co-Ed

Prerequisite: Physical Education 10 A continuation of P.E. 11, this course further allows students to pursue a variety of team and individual activities within the school and community. In addition to a strong recreational component, students will be expected to develop leadership capabilities and demonstrate this within class activities as well as in school and community settings. Emphasis is placed on creating an atmosphere in which every student can participate freely, regardless of athletic ability. Students will have input into choice of activities and events within the course. This course is an excellent opportunity for all students to complete the activity hours requirement for grad transitions or for those intending to study Kinesiology, Recreation or Health Sciences at the post-secondary level.

<u>Note:</u> Skating and swimming costs will be provided by the school, however, nominal fees will be required for (optional) enriched activities including Bowling, Golf, field trips to private recreational facilities and/or specialized guest instruction.

Fitness and Conditioning 11/12

Prerequisite: Physical Education 10

This is a co-educational course developed primarily for those students who are interested in a higher level of physical achievement. Students will learn and develop their own weight training techniques, practice proper running form, practice plyometric drills and discuss issues in sports for today's world. This class will enhance the students" abilities to compete in any sport. The course will also introduce aspects of human anatomy, human physiology, nutrition, diets, and performance enhancing drugs and supplements. Fees may be required for (optional) enriched activities.

Note: Skating and swimming costs will be provided by the school, however, nominal fees will be required for (optional) enriched activities including Bowling, Golf, field trips to private recreational facilities and/or specialized guest instruction.

Sport Academy (Soccer) 9.10.11.12

The Sport and Human Performance Program is designed for students with a keen interest in soccer and athletics. It combines daily physical training with a quality academic program in preparation for university entrance. There are opportunities for Certification in CPR, officiating and sports taping. Students will have two (one hour and twenty minute) sessions each week for 10 months with national-level soccer coaches, Colin Miller (UFV Women's Coach), Alan Errington (UFV Men's Coach), and Al Alderson (ASA). Session will be divided into three skill level groups. Each session will focus on individual skill development as well as team play. Personalized instruction is ensured with a player/coach ratio of 15:1.

The second component of the program is Strength and Conditioning. The focus of these sessions will be to improve strength, speed and agility. The students will have two sessions per week in the weight room working on individualized programs.

The Soccer Program is linear and continues all year long in the afternoon. The program is designed so that students can stay at their respective home schools and train at Abbotsford Collegiate for one block in the afternoon. The cost for the program is \$55 per month and that covers a kit and the salary for the coaches.

<u>Superfit 11/12</u>

Prerequisite: Physical Education 10

This course offers a variety of fitness related activities such as cardio-box, STEP training, weight training and conditioning as well as an introduction to Pilates, Yoga and alternative styles of training. The course is for all students who want to improve their fitness as well as develop their knowledge about nutrition, dieting, reducing stress and optional forms of exercise. Field trips to community recreation facilities and fitness clubs are included in the course curriculum. This is an excellent course to fulfill the activity hours requirement for Grad Transition. Fees of \$15.00 - \$20.00 will be collected for those (optional) enriched activities.

Note: Skating and swimming costs will be provided by the school, however, nominal fees will be required for (optional) enriched activities including Bowling, Golf, field trips to private recreational facilities and/or specialized guest instruction.

Sport Rehab Medicine 11

Prerequisite: Physical Education 10 Sports Medicine is a practical, hands on course designed to teach students the skills involved in the care and prevention of athletic injuries. Students will complete the BC Sports Medicine Council's Level 1 Sport Aid theory and Taping course. Students will learn about various facets of sport injuries, 1st aid care, training room management and professions related to sports medicine. Each student will be assigned an extracurricular practicum placement with a team (school or community). The practicum will be a minimum of 15 hours.

Girls or Boys Outdoor Ed 11/12

This class incorporates the best activities from all elements in PE. This course enables students to participate and be exposed to alternative activities, traditional sport and fitness, and outdoor education. This course will keep you active and will introduce you to a variety of life long fitness experiences. This class will have multiple mandatory field trips such as camping, kayaking, hiking, snowboarding, fitness classes, and more. Course Fee: \$100.00

Extended Day Fitness & Conditioning 9-12

This high-performance sports training course is open to all students. It will run all year, on alternating days, and will start at 7 am.

BUSINESS EDUCATION

Business Education Quick Reference:

Accounting 11IB Business & Management 11Accounting 12IB Business & Management 12

IB Business & Management 11 & 12

If you are considering business studies in university you should take this course. This course will develop an understanding of business theory and develop the ability to apply business principles & practices. Emphasis is place on decision-making and the business functions of: marketing, production, human resource management and finance. Students will learn the implications of business activity in a global market. University credit may be earned for this course with a final mark of 5,6,or 7 in year 2.

Accounting 11

Accounting is the language of business! This beginning accounting course will allow students to do simple bookkeeping for a small business. A certificate will be issued upon completion of course. This class is an excellent skill to have on a resume! Skills developed in this course will assist students in their Graduation Transitions.

Accounting 12

This course prepares the student very well for university accounting courses in Business Administration of Commerce. Students starting their own business can benefit with having these excellent accounting skills as well. Students will actually do the books for simulated small business" using the software Simply Accounting. A certificate will be issued to support resume skills. Skills developed in this course will assist students in their Graduation Transitions. Marketing 12 E-Commerce Economics 12

Marketing 12 E-Commerce

This course will explore the following topics with emphasis on project-based learning:

- the evolution and nature of e-commerce
- local and global retail e-commerce environments
- the economics of e-commerce
- revenue models
- development of the digital retail environment
- cyber-marketing strategies to direct traffic to websites
- distribution channels for a digital business
- advertisement for e-commerce



Economics 12

Economics 12 explores the effects economic activity has on our society, the nation, and the global community. In Economics 12, students gain an understanding of the principles behind government and social policies. Students planning to undertake advance studies in business will find this an essential course to understanding of how government, labour, and business interact. This course will be of interest for students interested to expand their understanding of Canadian society, and global economic and social trends. This is an approved grade 12 course at all Canadian universities.

INFORMATION AND COMMUNICATIONS TECHNOLOGY

Information & Communications Technology Quick Reference:

Media Design 9 Media Design 10 Makerspace and Robotics 9, 10 & 11 Media Design 11 Computer Programming 11 Media Broadcasting 10,11, 12 TV and Film 11/12 Digital Media Development 12 Computer Programming 12 Intro to Mechatronics 12 Photography 12

Media Design 9 (Info Tech 9)

This is the class where the fine arts meet technology. In this class students will gain skills to structure ideas, stories and information through digital media conventions. We will explore the editing and publishing of technical and symbolic elements of images, sounds and text. Students will be presented with current layout conventions, web standards and other digital media compliance requirements in regard to copyrights and duplication. We will apply creativity to the design and study of digital media masterpieces and discover their influences on society. Moreover, we will draw inspiration from media artworks of the past and present to explore viewpoints, particularly those of the First Peoples of Canada.

Media Design 10 (Info Tech 10)

This class is the continuation Media Arts 9. In this class students will pursue design opportunities with media technologies such as: video production; layout and design; graphics and images; photography, digital, and traditional; new emerging media processes such as sound design and network art. Students will also gain critical media production skills including: preproduction, production and post-production. They will become well versed in techniques for organizing ideas to structure stories and information to create points of view through imagery. Moreover, fundamentals of digital citizenship will be reviewed such as proper etiquette and literacy. Also, we will explore the history of design in local, indigenous and global communities to inspire self-expression via digital media.

Photography 12

Do you like to take pictures? Would you like to learn to use your digital camera more effectively and manipulate photos with the computer? This course



will teach principles of photography and fundamental camera techniques. Students will also learn to create and manipulate digital photographs using Adobe Photoshop. This course will also teach effective composition of photos using the rule of thirds,

framing, selective focus, and lighting techniques. Students will also be assigned to photograph various events in the school and their work will be part of the yearbook. Both "point and shoot" and digital SLR cameras will be used. Finally, students will learn to save their photos on-line and create an on-line gallery of their work.



<u>Media Desian 11 (DMD 11)</u>

Compositing: "is one of the hottest trends in Photoshop and photography today...Everywhere you look, from group photos, to sports portraits, to magazine covers and movie posters, chances are you've seen compositing."

What is compositing? Simply, it means to combine multiple images and text to make a single graphic design.

This course will explore Photoshop Compositing and Graphic Design. Students will use Adobe Photoshop to create composites of digital work in poster form using a variety of page layout, compositing concepts, and graphic design concepts. Adobe Illustrator will also be used to create vectored graphic designs and logos that can then be placed into their projects.

At the completion of the course, students will be able to use their skills in various design and production opportunities. Note: No previous computer experience is necessary. All assignments will be completed in the class.

Diaital Media Development 12

Explore and refine skills developed in DMD 11 in order to pursue a career in computer graphics, design, and video editing. Students will work with advanced applications to produce high quality digital video projects and compositing/graphic design projects. Emphasis will be placed on both the technical and artistic side of digital media development. Through this course, students will be given the opportunity to experience being a freelance graphic designer and a freelance videographer. This provides students with a fair amount of independence in their choice of projects. With a wide variety of choices and options available, DMD 12 students must be highly motivated, independent, and consistently productive.

Media Broadcasting 10. 11 & 12

This course will introduce students on how to set up and create TV broadcasts that will be used in the



school throughout the semester. Students will use computers for video editing and video enhancement. Students will also learn to operate

cameras and learn how lighting affects video quality. Students will use sophisticated equipment and learn what it takes to develop a good TV studio.

Makerspace and Robotics 9, 10 & 11

Do you like to Tinker and take things apart to learn how they work? Are you thinking about a career in engineering or technology? In this introductory Makerspace course, you will have a hands-on opportunity to learn the basics of programming / coding using a variety of robotic devices. Once you have mastered the basics, you will learn how to build and program complex electronic devices to complete a number of fun challenges and tasks. Additionally, the course will focus on teaching the skills needed to digitally design an object to be produced on a 3D printer. This course will include a career discovery field trip to a local university and a tour of a local industry.

Introduction to Mechatronics 12

Definition: Mechatronics is a multidisciplinary field of science that includes a combination of mechanical engineering, electronics, and computer engineering. Are you interested in learning more about the exciting world of engineering? Are you thinking about a career in engineering? To set you apart at the next level, you will definitely need to have technical skills to back up your academics. Our Makerspace will focus on providing you with the key technical skills needed to help you succeed at the post-secondary level. Learn to digitally design and fabricate like a pro using our laser cutter and 3D printers or design, build and learn to code with Arduino or Raspberry Pi. Prerequisite: Minimum of a C+ in Foundation of Math 10, and an interest in engineering



Computer Programming 11

This course is designed to allow students to understand how a computer works, and to create programs/3d animations/3d games to run on a windows-based computer. Computer programming 11 will give students the chance to develop computer skills in a supportive environment where students will be encouraged to share and work with their classmates.

The majority of this course will be spent programming in the ALICE programming environment.

Alice is an innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web. Alice is a teaching tool for introductory computing. It uses 3D graphics and a drag-and-drop interface to facilitate a more engaging, less frustrating first programming experience.

NOTE: No previous computer experience is necessary. All Assignments will be completed in class. The software used in this class is freely available for download.

Computer Programming 12

(Pre-Requisite: Computer Programming 11) In Computer Programming 12, students will be given the opportunity to develop their Computer Programming 11 skills to a higher level. This course will begin with a review of Computer Programming 11 topics and then continue into advanced programming topics.

Students will again be working in the ALICE programming environment. There will be a transition to programming in JAVA in the second half of the course.

If you have a strong interest in computers or are considering taking post-secondary courses involving computers, this course is a must. This course will constantly make use of the school's network and the internet to support the students' class work and assignments.

Note: The majority of the assignments in this course will be completed during class time. The software used in this class is freely available for download.





Film and TV 11 & 12

Films come in all forms: music videos, slice of life, action, animation, documentary, drama, narrative, and comedy are al varieties of films the students will choose from to create their own. The course will explore the necessary elements of each genre using specific examples to support the analysis. Pre-production and post-production techniques in the film quality will be introduced. Students will utilize lighting, sound, script-writing and post-production techniques in Premiere Pro. They will then apply their knowledge to create films in chosen genres that represent their vision. During the production process of their films, students will be responsible for pre-production, production, and post-production of the film and the personnel used. Upon completion of this course, students will have produced multiple professional quality short films of 4 to 10 minutes in length.

HOME ECONOMICS

Home Economics Quick Reference:

Foods and Nutrition 9 Foods and Nutrition 10 Foods and Nutrition 11 Foods and Nutrition 12 Mixed Fiber Arts 11 & 12

Foods and Nutrition 9

Students will improve their food preparation skills while learning how nutrition affects the mind and body. Personal safety and sanitation skills will be learned and practiced. Students will be able to prepare a wide variety of nutritious and delicious foods using a variety of basic cooking preparation methods. Be prepared to impress family and friends with your new cooking skills.

Foods and Nutrition10

Foods 10 is a continuation of Foods 9 with more emphasis on health and safety, along with the Canadian food culture and the design and preparation of your favorite foods. Pastas, soups, sauces, and stir frys are included as well as baking cookies, yeast breads, and special occasion cakes. Learn how to make delicious meals, tasty snacks, and desserts. Develop a passion for cooking as well as advancing your cooking skills and knowledge.

Foods and Nutrition 11

*It is recommended that students complete Foods 9 or Foods 10 before enrolling. Food Studies 11 focuses on the planning and preparation of nutritious foods for individuals and families. Students increase their knowledge of the nutritional, social, and economic factors that affect food selection and preparation. A study of international culture and cuisine focuses on learning about the unique flavors and cooking techniques used to prepare some of the world's favorite dishes. Students will also develop skills in time management, budgeting while preparing and presenting delicious foods in the class.

Mixed Fiber Arts 11 & 12

Learn how to sew, knit and crochet, while helping your community and the environment. This course focuses on how to create objects that allow for individual expression, with a focus on being environmentally friendly. Students will gain skills that include making prototypes, testing, and sharing various creations, using both new and repurposed materials. A basic skill set is helpful, but not necessary. Students will also gain an understanding into how to price, promote and sell their handmade items in the future. Interpersonal & Family Relationships 11 Housing & Living Environments 12 Baking and Pastry 12

Foods and Nutrition 12

** It is strongly recommended that students complete Food Studies 10 or 11 before enrolling in this course. This is a course for the cooking enthusiast who is eager to become skilled in gourmet cuisine. To have success in this course you must already have a solid foundation of basic cooking skills and be efficient in the kitchen. Students will learn advanced baking and cooking skills – learning how to present classic dishes with flare. Create your own recipes and elegant restaurant-quality meals with a style that will impress any guest. Projects: Christmas Tea – Gingerbread Village design and preparation, Spring Tea – A spring theme including décor and a student-developed menu, Senior Iron Chef Abby Competition – students develop and lead the preparation of one course.

Baking and Pastry 12

Do you love baking cakes, cookies and pastries? Would you like to use your creativity to try new decorating techniques and explore flavours, textures and design? Then Baking and Pastry Arts 12 is the course for you. This class will give students the opportunity to learn basic and advanced baking skills and decorating ideas while making sweet and savory desserts and pastries. Enjoy cake wars, cookie challenges and pastry faceoffs in this exciting new course.

Interpersonal & Family Relationships 11

Interested in Psychology? Thinking of a career in a nurturing profession such as social work, childcare or teaching? Study personality typology, intellectual development and the self in a social context. Study relationships leading to marriage, different cultural practices, legal aspects of marriage and relationship difficulties and solutions. This course is open to grade 10, 11 and 12 students.

Housing & Living Environments 12

Prepare yourself for successful living on your own once you leave home. Learn about housing and interior design. Make an accessory for your present or future home. Learn about the needs of children from prenatal to birth to school age and develop good parenting skills. Understand how adults continue to grow as they move from adolescents through to old age. This course is open to grade 10, 11 and 12 students.

INDUSTRIAL EDUCATION

Industrial Education Quick Reference:

Metalwork 9 Metalwork 10 Metalwork 11 Metalwork 12 Women in Trades 9-12 Woodwork 9 Woodwork 10 Woodwork 11 Woodwork 12 Power Mechanics 10

<u>Metalwork 9/10</u>

Students enrolling in this course will be exposed to the field of metal production. Areas studied include welding, machining, and blacksmithing. Entry level metal working tools, precision measuring and tool maintenance will be covered. Personal project work will be required, and students will construct projects that they can take home.

Power Mechanics 10

Power mechanics will introduce students to mechanical devices, in particular small engines. Engine work will cover both 2 and 4 cycle engines. The primary focus of this section will be on gasoline engines, but diesel motors will be explored as well. Tools of the trade and scientific principles such as momentum, friction and aerodynamics will also be investigated. Taking this course will allow students interested in grade 11/12 auto mechanics a greater background knowledge.

Woodwork 9/10

Students taking this class will explore the basics of working with wood, wood working tools and project design. The course will also explore some fundamental aspects of tool maintenance. Taking this class will teach you to design, layout and assemble various projects from wood. The students will also learn the tools of the trade and safe working practices in and around a shop. This is a hands on course and participants will be expected to leave the class with a number of personal projects. Technology Explorations 10 Skills Explorations 11 Automotive Technology 11 Automotive Technology 12 Auto 12 Engine and Drive Train

Metalwork 11

Metalwork 11 is a general metalwork course offering a combination of theory and practice. The student will safely learn how to use hand tools, shop equipment, weld, fabricate metal projects and perform other metal shop duties.

Metalwork 10 is advised as a prerequisite. Preferred acceptance will be given to students with Metalwork 10.

Metalwork 12

Metalwork 12 will expand upon the basic skills and knowledge acquired in Metalwork 11. A greater emphasis is placed on accuracy in the completion of finished projects. Students will be encouraged to design their own projects. The student will become proficient in the use of drills, lathes, milling machines and TTG welding.



Woodwork 11

This course introduces students to a comprehensive wood program. Students will develop fundamental skills and techniques through the construction of various projects. A theoretical component is required in order to introduce students to terminology associated with the practical skills covered. Woodwork 10 is advised as a prerequisite. Preferred acceptance will be given to students with Woodwork 10.

Woodwork 12

Students will develop a deeper understanding of advanced woodworking skills through theory and project construction. The course will include project design, problem solving, costing of material, mass production techniques, advanced joinery, and finishing processes. Much of the time will be spent on self-designed projects. The course is an excellent opportunity to create furniture and cabinetry for your own use. Woodwork 11 is not required but is an asset. Preferred acceptance will be given to students with previous levels of this course.

Automotive Technology 11

Automotive Technology 11A is an introductory course focusing on basic automotive systems. Emphasis is placed on the safe use of hand and mechanic shop tools. In both the theoretical and practical portions systems such as brakes, steering, suspension, engine operation and automobile construction will be explored. * Students are encouraged to bring their own vehicles. Preferred acceptance will be given to students with level 10 of this course.

Automotive Technology 12

This course will explore the theory and operation of advanced automotive systems. The student is expected to possess a high degree of competency in basic shop procedures and hands-on exercises with instruction. The students will be expected to apply previous knowledge as they diagnose and repair more advanced vehicle systems. The systems will include: transmissions, transaxles, differentials and basic electronics. *Students are encouraged to bring their own vehicles.

Automotive Technology 12 Engine and Drive Train

Prerequisite: Automotive Technology 12 This course builds upon the concepts covered in Automotive Technology 11 & 12. Your previous knowledge and practical experience in the principles of Engine and Drive Train, Automotive Electricity, Electronics, and troubleshooting will be the focus. The scope of this course is limited only by the interest and ability of the student. This course is strongly recommended for students wishing to pursue a career in the Mechanical Service Industry. * Students are encouraged to bring their own vehicles.

Women in Trades 9-12

This course is open to grade 9-12 students. This is an introductory course that will introduce female students to metal work, jewelry making, woodworking, automotive maintenance and computer-controlled machines (CNC). Being a project centered course, students will make a variety of projects. Project examples are jewelry, candle holders, picture frames, bowls, goblets, jewelry boxes, CNC made signs, vehicle oil change and basic maintenance.

Technology Explorations 10 Skills Explorations 11

These courses will introduce students to a variety of careers in trades through hands on experiential learning. The trades sectors that may be explored are Construction, Auto, Electrical, Plumbing, Drafting, and Computer Number Controlled (CNC) Operation. Students will learn technical skills and will become familiar with the BC apprenticeship process as well as Industry Training Authority (ITA). This course is a great way to prepare for a smooth transition from school to work by teaching the skills, attitudes, and sense of responsibility necessary to be successful.



CAREER DEVELOPMENT

Career Life Education 10

Career Life Education 10 replaces Planning 10. This course helps students develop their career goals, as well as the skills, attitudes and behaviors that enable them to take increased responsibility for their own well-being. The four themes are self-awareness, working with others, career knowledge and awareness, and career planning.

Career Life Connections 12

Career Education helps students discover the bridge between classroom learning and post-graduation life and is intended to make their learning meaningful and relevant to their next steps after high school. Students are expected to develop an integrated post-graduation plan that is connected to a capstone or culminating project, which demonstrates their learning in an area of personal interest. Ideally, the capstone or culminating project will be linked to an area that students are passionate about and anticipate they will be pursuing further education and learning and-or a career in.



Work Experience 12A & 12B

Work experience is intended to help prepare students for the transition from secondary school to the world of work. It is an opportunity for students to apply classroom learning in a context outside of school and bring a new perspective to their learning. It also gives students a chance to gain new skills that can be used in future work opportunities.

The Work Experience courses are a required part of each District Career Program.

Youth Work in Trades

If you are working in an apprenticable trade (over 150 in BC) and if your employer signs you up as an apprentice, you can earn 16 credits towards graduation as well as a \$1,000 scholarship. What is Youth Work in Trades?

It provides an opportunity to become trades qualified at a much younger age and increases lifetime earning potential.

Part-time work hours count toward apprenticeship completion

Requires special application process through the school and indenturing through ITA – and an agreeable employer.

Best started in the summer following grade 10 but can be started at other times as well.

Any Student in any program can be indentured in any trade – as long as there is an agreeable employer.

At least 240 of the required 480 hours must be paid hours.

Students in Automotive, Culinary Arts, Carpentry, Electrical and Welding have an added advantage because they are doing technical training as well. ITA awards a \$1,000 scholarship to those who: complete the program AND maintain a C+ average AND are still employed in the trade for 900 hours, and 6 months after graduation.

For more information see Mr. Grell in the Couselling Centre.

SERVICE AND LEADERSHIP

Community Service 12

Community Service Leadership is a course designed for students in Grade 11 or 12 who have maintained a C+ average or better in their last academic year. Students will work under the supervision of a teacher or mentor to provide the assistance to students as individuals and/or small aroups in a variety of learning activities. Students will develop skills in instruction, communication, interpersonal relations, leadership, teamwork and conflict management. Students will also learn the value and complexity of social diversity, while acquiring an appreciation of the importance of lifelong learning and helping others. Course evaluation is based on subjective observations as to the student's ability to: demonstrate leadership skills, work cooperatively in a team, communicate effectively, and demonstrate flexibility. This is an excellent course for those students looking to develop communication and leadership skills that will benefit them in all aspects of their future endeavors.

Peer Tutoring 12

Note: some peer tutors may be assigned to an after school placement in an academic study hall. Peer Tutoring is a course designed for students in Grade 11 or 12 who have maintained a C+ average or better in their last academic year. This is a four-credit course that is divided into two parts. The first part focuses on the training of the tutor while the second part involves the student in the practical application of that training. Emphasis is placed on development of leadership qualities such as: communication skills, acceptance of responsibility, management skills, interpersonal skills and risk-taking. Students will examine the evaluative processes of teaching and successful study techniques. This is an excellent course for those interested in pursuing a career in teaching.

Leadership and Government 9/10/11/12

This course is open to students in Grades 9, 10, 11, and 12, and meets before school at 7:10 am two mornings each week.

. The course is designed to equip students for the leadership opportunities available in the school. This course covers the difference between leadership and management and how to apply each to student run activities. The course includes the planning and running of various activities such as spirit days, pep rallies, dances, and many other fun lunch time activities. Students will also organize school events such as community interaction days, assisting with the Food Bank, Operation Christmas Child, and various other events.

Note: Students in Leadership are expected to be involved in at least 10 hours of volunteer time in the community each term.

PE Leadership 9/10/11/12

This course enables students to engage in positive and effective leadership in the school by organizing and implementing recreational activities for the school community and providing service at school events and to the school's athletic program. Events may include: Pep rallies, lunch-time intramurals, Storm the Wall, Snowball Tournament, sports banquets, scorekeeping and timing at games, etc.

<u>Yearbook 11 & 12</u>

This course introduces students to the skills necessary to produce a publication from photoready materials. Aspects of finance, planning, advertising, photography, reporting, copy-editing, graphics and layout will be touched on. The culmination of this course will be the production of the school yearbook using the tools gained. Students registering for this course should be prepared for both individual and group work inside and outside of school hours.



UNIVERSITY ENTRANCE REQUIREMENTS

B.C. Universities

There are two ways of entering a B.C. university. Students may enter <u>directly</u> from high school, or they may <u>transfer</u> from another post-secondary institution.

As course requirements vary from program to program, it is essential that students research the particular program <u>and</u> institution they plan to apply to.

a) Direct Entry

In general, universities will require English 11 and 12, a science 11 and a second language 11 (UBC-Van & SFU) and an acceptable math 11, Pre-Calculus 11, Foundations of Math 11 (SFU & UVIC) or Foundations of Math 12 (UBC).

While there are required Grade 11 courses, admission averages are calculated on acceptable Grade 12 course work **including English 12**. **UBC** recommends you plan to present a **minimum of 6 grade 12 academic or non-academic courses**, including degree specific grade 11&12 subject category requirements. **SFU** now required a minimum of **5 grade 12 subjects** from their approved course **List A** (more emphasis) and **List B**. At Abbotsford Senior we offer the following senior academic courses.

- Anatomy and Physiology 12
- Chemistry 12
- Physics 12
- French 12
- Geology 12

- All IB courses
- Statistics 12
- History 12
- Law 12

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• Economics 12

- Pre-Calculus 12
- Calculus 12
- BC First Nations Studies 12
- Social Justice 12

PLEASE NOTE: Students are responsible for checking admission requirements and approved courses at the schools they are considering attending. **Our local university**, **UFV**, **offers a variety of admission options to incoming students**, from high school graduation to competitive entry.

b) <u>Transfer</u>

Students can transfer to a university from another school, such as UFV upon completion of one full year of <u>transferable</u> course work, usually consisting of a minimum of 8 courses. In this case, the high school requirements, such as a second language 11, are waived unless required for the university program they are applying to.

Helpful Post Secondary Websites

University of B.C. University of Victoria Simon Fraser University University of Northern B.C. University of the Fraser Valley Kwantlen Polytechnic University BC Institute of Technology General Post-Secondary Info Education Planner BC

NOTE: Alberta schools, as well as McGill and some Ontario Universities require 5 Grade 12 subjects, as does UNBC. Most Ontario universities require Calculus 12 in addition to Pre-Calculus 12 for admission to Business, Science and Engineering programs. Alberta universities require both Pre-Calc 12 and Calculus 12 for Engineering.

SCHOLARSHIP INFORMATION

Provincial Scholarships Program

Recipients must be a Canadian citizen or Permanent Resident.

a) **BC Achievement Scholarships**)

The 8000 top BC grads with the highest cumulative average based on courses needed for graduation (both required and elective) in grades 10, 11, and 12 are eligible to receive a \$1250 voucher towards their post-secondary education.

b) **District Scholarships**

District Scholarships acknowledge excellence in fields other than academic. The District Scholarships are in the amount of \$1250. Candidates for District Awards must:

•complete graduation requirements

• submit a major project in their chosen field (100 hours or more) which will be evaluated by the District Scholarship Committee. Fields include Fine Arts, Applied Skills, International Languages, Physical Activity, Community Service, Trades Training and Indigenous culture.

c) **BC Excellence Scholarships**

55 \$5000 scholarships available to recognize well-rounded grads who have demonstrated community service in and out or school, and shown aptitude and commitment to their chosen career path. Students must be nominated by their school. The nominees will have their application forwarded to the Ministry of Education by \$D34.

There are also BC government scholarships for **secondary school apprentices** and for exceptional students going into **teaching**.

Other Scholarships and Bursaries

Scholarships are awarded based on merit, and usually for high achievement in academics. A background in leadership, service and extra-curricular activities are often required. Students may be eligible to compete for scholarships from local, regional, provincial or international **organizations**, **companies**, **unions**, **sports** groups, **credit unions**, etc. All the **universities and colleges** also offer scholarships to entering and continuing students. Information is available at each school's website. Students are advised to check in the Counselling Centre regularly. More importantly, active seekers should conduct their own search, using the online resources available at Scholarships Canada (<u>scholarshipscanada.com</u>). Deadlines, criteria and application procedures vary widely. These are non-repayable and awarded to dedicated and deserving students who have monetary need.

Abbotsford Community Foundation Scholarships & Bursaries

The Abbotsford Community Foundation Scholarships & Bursaries program annually provides approximately 300 awards to all graduating SD34 students. The application is made available early in February. All students need to do to apply for up to 10 awards is complete one online application at **abbotsfordcf.org** which requires written statements, a reference letter, checklist and a simple budget. Winners will be announced at Convocation 2021. Application deadline; end of February. This is not open to International students.

Government Student Loans

The federal and provincial governments provide loan and grant assistance for students who can demonstrate financial need. Student loans are intended to supplement, not replace, the financial resources that the recent high school graduate and their family are expected to contribute. Information and an online application can be found at **studentaidbc.ca**