



ALEXANDER
ACADEMY



Course Descriptions 2020-2021

The IB Diploma Programme (DP)

The IB Diploma Program (DP) is an academically challenging and balanced program designed for students in grades 11 and 12. The Diploma Program courses focus on creativity, innovation, self-discipline, and the ability to function as part of a team. These capabilities are embedded in our programs in an international context. They give students the perspectives of other cultures, societies and countries, and teach them how they can engage with their peers. All of these features help prepare students to be college and career ready in an increasingly global society.

How does it work?

The IB Diploma Programme is made up of 6 subject groups and the DP core – comprising Theory of Knowledge (TOK), Creativity, Activity, Service (CAS) and the Extended Essay (EE)

Six Major Groups (with different subjects in each group)

Group 1: Studies in Language and Literature

Group 2: Language Acquisition

Group 3: Individuals and Societies

Group 4: Sciences

Group 5: Mathematics

Group 6: The Arts

IB Certificate vs. IB Diploma

Students can either work towards an IB certificate or diploma. To get a certificate, only one IB course and externally-assessed exam is required. Obtaining a diploma in the program consists of several requirements – students are required to:

- Take each one of the six prescribed courses
- Write an essay of up to 4000 words in Extended Essay (EE)
- Complete at least 50 hours in creative, action and service requirements
- Complete the “Theory of Knowledge” philosophy requirement

Higher Level (HL) vs. Standard Level (SL)

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

Each student takes at least three (but not more than four) subjects at higher level, and the remaining at standard level.

HL and SL will be determined based on the needs of the students.

Assessment Models: Using external and internal assessment

The IB uses both external and internal assessment in the DP.

External assessment

Examinations form the basis of the assessment for most courses. This is because of their high levels of objectivity and reliability.

They include:

- essays
- structured problems
- short-response questions
- data-response questions
- text-response questions
- case-study questions
- multiple-choice questions – though these are rarely used.

Internal assessment

Teacher assessment is also used for most courses. This includes:

- oral work in languages
- fieldwork in geography
- laboratory work in the sciences
- investigations in mathematics
- artistic performances.

The cost varies depending on the number of exams written. These costs are charged directly by the IB Organization and are in addition to the Alexander Academy Tuition and Consolidated Extra Fees. Examination fees for 6 subjects are approximately \$1400.

Schedules

Schedules for IB courses will be made once students finalize their course selection.

Course Offerings

IB Language A: Language and Literature (English)

The language A: language and literature course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices, and to encourage students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception. Helping students to focus closely on the language of studied texts and to become aware of the role of wider context in shaping meaning is central to the course. The study of literature in translation from other cultures is especially important to IB DP students because it contributes to a global perspective. Texts are chosen from a variety of sources, genres and media.

French Ab Initio

Offered at SL only, language ab initio is a language acquisition course designed for students with no previous experience in—or very little exposure to—the target language. Language ab initio students develop their receptive, productive and interactive skills while learning to communicate in the target language in familiar and unfamiliar contexts. Students develop the ability to communicate through the study of language, themes and texts. There are five prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet. While the themes are common to both language ab initio and language B, the language ab initio syllabus additionally prescribes four topics for each of the five themes, for a total of 20 topics that must be addressed over the two years of the course.

IB History

The DP history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources.

IB Biology

By studying biology in the DP students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the sciences. Teachers provide students with opportunities to design investigations, collect data, develop manipulative skills, analyse results, collaborate with peers and evaluate and communicate their findings.

IB Chemistry

Chemistry is often a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science. Both theory and practical work should be undertaken by all students as they complement one another naturally, both in school and in the wider scientific community. The DP chemistry course allows students to develop a wide range of practical skills and to increase facility in the use of mathematics. It also allows students to develop interpersonal and information technology skills, which are essential to life in the 21st century. Teachers provide students with opportunities to develop manipulative skills, design investigations, collect data, analyse results and evaluate and communicate their findings.

IB Environmental systems and societies SL

Environmental systems and societies (ESS) is an interdisciplinary course offered only at standard level (SL). This course can fulfill either the individuals and societies or the sciences requirement. Alternatively, this course enables students to satisfy the requirements of both subjects groups simultaneously while studying one course.

ESS is firmly grounded in both a scientific exploration of environmental systems in their structure and function, and in the exploration of cultural, economic, ethical, political and social interactions of societies with the environment. As a result of studying this course, students will become equipped with the ability to recognize and evaluate the impact of our complex system of societies on the natural world.

The interdisciplinary nature of the DP course requires a broad skill set from students, including the ability to perform research and investigations, participation in philosophical discussion and problem-solving. The course requires a systems approach to environmental understanding and promotes holistic thinking about environmental issues. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, knowledge transfer and use of primary sources. They encourage students to develop solutions at the personal, community and global levels.

IB Physics

By studying physics students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject. Teachers provide students with opportunities to develop manipulative skills, design investigations, collect data, analyse results and evaluate and communicate their findings.

IB Mathematics

The IB DP mathematics standard level (SL) course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigour required for mathematics HL. Students should, wherever possible, apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

The internally assessed exploration offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

IB Visual arts

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

IB Theory of Knowledge (core course: requires for IB DP)

Theory of knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It plays a special role in the DP by providing an opportunity for students to reflect on the nature of knowledge, to make connections between areas of knowledge and to become aware of their own perspectives and those of the various groups whose knowledge they share. It is a core element undertaken by all DP students, and schools are required to devote at least 100 hours of class time to the course.

The overall aim of TOK is to encourage students to formulate answers to the question “how do you know?” in a variety of contexts, and to see the value of that question. This allows students to develop an enduring fascination with the richness of knowledge.

IB Creativity Action Services (core course: requires for IB DP)

CAS is organized around the three strands of creativity, activity and service defined as follows.

- Creativity—exploring and extending ideas leading to an original or interpretive product or performance.
- Activity—physical exertion contributing to a healthy lifestyle.
- Service—collaborative and reciprocal engagement with the community in response to an authentic need

IB Extended Essay (core course: requires for IB DP)

The extended essay is a compulsory, externally assessed piece of independent research into a topic chosen by the student and presented as a formal piece of academic writing. The extended essay is intended to promote high-level research and writing skills, intellectual discovery and creativity while engaging students in personal research. This leads to a major piece of formally presented, structured writing of up to 4,000 words in which ideas and findings are communicated in a reasoned, coherent and appropriate manner. Students are guided through the process of research and writing by an assigned supervisor (a teacher in the school). All students undertake three mandatory reflection sessions with their supervisor, including a short interview, or viva voce, following the completion of the extended essay.

Career Life Connections (provincially required course)

Career Life Connections requires students to identify and develop personal interests, passions and goals. Students reflect on learning experiences and competency development in school and community, build confidence in their contributions, and explore roles and possibilities in personal, education, and work life contexts. They develop and apply the personal management skills needed to pursue who and how they want to be in the world. This offering also facilitates community networking and experiential learning both inside and outside of school.

BC Dogwood Graduation Program

Graduation Requirement for BC Dogwood Certificate

REQUIRED COURSES	
SUBJECT AREA	Minimum Credits
Career Life Education (or Planning 10)	4
Career Life Connections (or Graduation Transitions)	4
a Language Arts 10*	4
a Language Arts 11*	4
a Language Arts 12*	4
a Mathematics 10*	4
a Mathematics 11 or 12*	4
an Arts Education and/or Applied Design, Skills, and Technologies 10, 11 or 12*	4
a Social Studies 10	4
a Social Studies 11 or 12*	4
a Science 10	4
a Science 11 or 12*	4
Physical and Health Education 10	4
TOTAL	52 credits
ELECTIVE CREDITS	
Students must earn at least 28 elective credits from Grade 10-12 courses.	28 credits
OVERALL TOTAL	80 credits**
PROVINCIAL GRADUATION ASSESSMENTS	
Numeracy Assessment	
Literacy Assessment	
* See pages 5-8 for eligible courses.	
** Of the 80 credits for graduation, at least 16 must be at the Grade 12 level, including a Grade 12 Language Arts course. Others may be required courses or elective credits.	

English Language Arts

English 8	
English 9	
Composition 10 (2 credits)	Choose ONE of: Literary Studies 10 (2 credits) Creative Writing 10 (2 Credits) Spoken Language 10 (2 credits) New Media 10 (2 credits)
Choose ONE of: Composition 11 Literary Studies 11 (4 credits)	

Creative Writing 11 (4 Credits) Spoken Language 11 (4 credits) New Media 11 (4 credits)
English Studies 12

Composition 10

Composition 10 is designed to support students in their development of written communication through a critical process of questioning, exploring, and sampling. Within a supportive community of writers, students will work individually and collaboratively to explore and create coherent, purposeful compositions. Students will read and study compositions by other writers and consider a variety of styles as models for the development of their writing. The course builds students' writing competencies by introducing them to varied structures, forms, and styles of compositions. Students have opportunities to individually and collaboratively study, create, and write original pieces, exploring audience and purpose. They also develop their craft through processes of drafting, reflecting, and revising.

Literary Studies 10

Literary Studies 10 is designed for students who are interested in the literature of a particular era, geographical area, or theme, or in the study of literature in general. The course allows students to delve more deeply into literature as they explore specific themes, periods, authors, or areas of the world through literary works in a variety of media. Giving students the choice of a range of literary topics allows them to follow their passion and at the same time: - increase their literacy skills through close reading of appropriately challenging texts - enhance their development of the English Language Arts curricular competencies, both expressive and receptive - expand their development as educated global citizens - develop balance and broaden their understanding of themselves and the world - develop higher-level thinking and learning skills.

New Media 10

New Media 10 is a program of studies designed to reflect the changing role of technology in today's society and the increasing importance of digital media in communicating and exchanging ideas. This course is intended to allow students and educators the flexibility to develop a program of study centred on students' interests, needs, and abilities, while at the same time allowing for a range of local delivery methods. New Media 10 recognizes that digital literacy is an essential characteristic of the educated citizen. Coursework is aimed at providing students with a set of skills vital for success in an increasingly complex digital world by affording opportunities to demonstrate understanding and communicate ideas through a variety of digital and print media. New Media 10 explores tasks and texts designed to introduce students to the study of new media.

Spoken Language 10

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

Creative Writing 10

Creative Writing 10 is designed for students who have an interest in creative expression through language. The course provides students opportunities to build their writing skills through the exploration of identity, memory, and story in a range of genres. Within a supportive community of writers, students will collaborate and develop their skills through writing and design processes. This course is intentionally grounded in the sampling of writing processes, inviting students to express themselves creatively as they experiment with, reflect on, and practise their writing.

Composition 11

Composition 11 is designed to support students as they refine, clarify, and adjust their written communication through practice and revision. Students will read and study compositions by other writers and be exposed to a variety of styles as models for the development of their writing. The course provides opportunities for students to, with increasing independence, study, create, and write original and authentic pieces for a range of purposes and real-world audiences. They will expand their competencies through processes of drafting, reflecting, and revising to build a body of work that demonstrates expanding breadth, depth, and evidence of writing for a range of situations. They will develop confidence in their abilities as they consolidate their writing craft.

New Media 11

New Media 11 is a program of studies designed to reflect the changing role of technology in today's society and the increasing importance of digital media in communicating and exchanging ideas. This course is intended to allow students and educators the flexibility to develop an intensive program of study centred on students' interests, needs, and abilities, while at the same time allowing for a range of local delivery methods. New Media 11 recognizes that digital literacy is an essential characteristic of the educated citizen. Coursework is aimed at providing students with a set of skills vital for success in an increasingly complex digital world by affording numerous opportunities to demonstrate understanding and communicate increasingly sophisticated ideas through a wide variety of digital and print media. Compared with New Media 10, New Media 11 features tasks and texts of greater complexity and sophistication. As well, the Grade 11 course extends the depth and breadth of topics and activities offered in New Media 10.

Literary Studies 11

Literary Studies 11 allows students to delve deeply into literature. Students can explore specific themes, periods, authors, or areas of the world through literary works (fiction and non-fiction) in a variety of media. Giving students the choice of a range of literary topics allows them to follow their passion and at the same time: - increase their literacy skills through close reading of appropriately challenging texts, - enhance their development of the English Language Arts curricular competencies, both expressive and receptive, - expand their development as educated global citizens, - develop balance and broaden their understanding of themselves and the world, - develop higher-level thinking and learning skills.

Creative Writing 11

Creative Writing 11 is designed for students who are interested in developing confidence and refining their writing skills through self-expression for various creative purposes. The course provides students with in-depth opportunities to explore personal and cultural identities, memories, and stories in a wide range of genres. Within a supportive community, students will collaborate and strengthen their skills through writing and design processes. Creative Writing 11 is grounded in the exploration and application of writing processes, inviting students to express themselves creatively as they reflect on, adjust, and extend their writing skills.

English Studies 12

English Studies 12 is a comprehensive Language Arts course designed for all students that includes essential disciplinary learning at the Graduation level. It represents the culmination of all that has been learned throughout English Language Arts K-11. The course builds on and extends students' previous learning experiences in ELA and EFP 10 and 11 courses and provides students with opportunities to: - refine their ability to communicate effectively in a variety of contexts and to achieve their personal and career goals, - think critically and creatively about the uses of language, - explore texts from a variety of sources, in multiple modes, and that reflect diverse worldviews, - deepen their understanding of themselves and others in a changing world, - gain insight into the diverse factors that shape identity, - appreciate the importance of self-representation through text, - contribute to Reconciliation by building greater understanding of the knowledge and perspectives of First Peoples, - expand their understanding of what it means to be educated Canadian and global citizens.

English Language Learning (ELL)

ELL LEVEL 1

In ELL 1, students will learn basic vocabulary and simple phrases and sentences to engage in classroom experiences (as developmentally appropriate)

ELL LEVEL 2

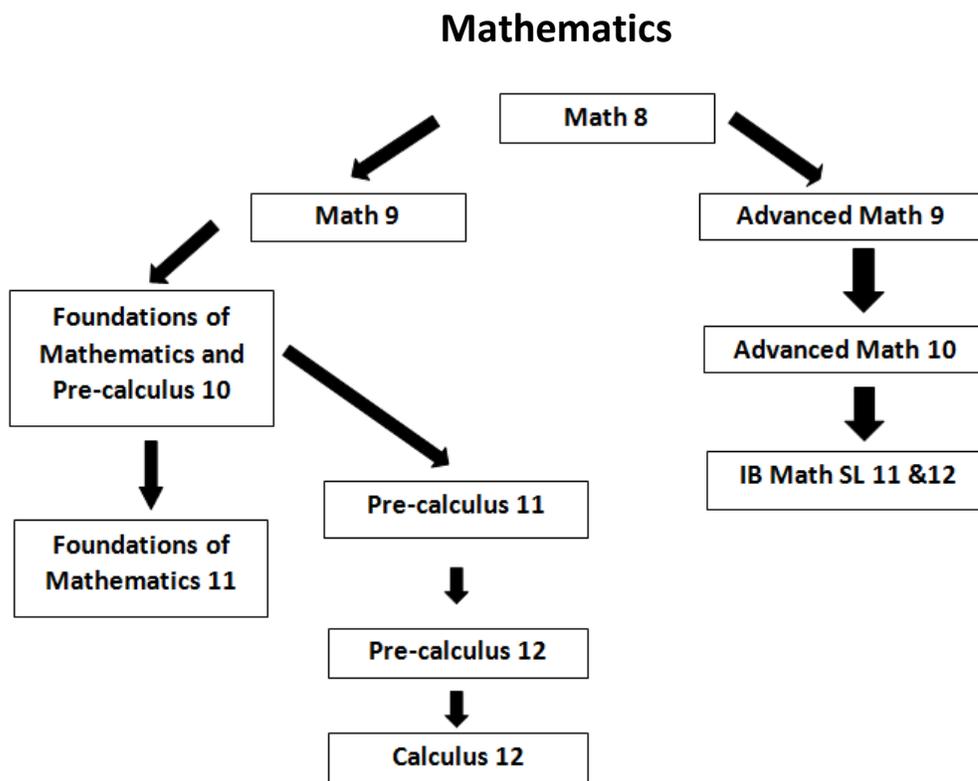
In ELL 2, students will learn the basic and utility vocabulary and structures for social interaction and academic experiences. They strengthen decoding and reading comprehension and developing essential writing skills.

ELL LEVEL 3

In ELL3, students bring their attention to vocabulary, grammatical forms and language functions required for academic tasks. Explicit instruction will be given in reading and writing strategies.

ELL LEVEL 4 – Board Approved Transitional English

This course is designed to lead students from their intermediate English skills of reading, writing, listening and speaking to a level where they can function satisfactorily in regular academic courses.



Mathematics 8

In Math 8, students explore the following big ideas:

- Number represents, describes, and compares the quantities of ratios, rates, and percents.

- Computational fluency and flexibility extend to operations with fractions.
- Discrete linear relationships can be represented in many connected ways and used to identify and make generalizations.
- The relationship between surface area and volume of 3D objects can be used to describe, measure, and compare spatial relationships.
- Analyzing data by determining averages is one way to make sense of large data sets and enables us to compare and interpret.

Mathematics 9

- In Math 9, students explore the following big ideas:
 - The principles and processes underlying operations with numbers apply equally to algebraic situations and can be described and analyzed.
 - Computational fluency and flexibility with numbers extend to operations with rational numbers.
 - Continuous linear relationships can be identified and represented in many connected ways to identify regularities and make generalizations.
 - Similar shapes have proportional relationships that can be described, measured, and compared.

Advanced Mathematics 9

The topics of this course will be explored in more depth than those in Mathematics 9.

Foundations of Mathematics & Pre-Calculus 10

Foundations of Mathematics and Pre-Calculus 10 is designed to provide students with the mathematical understandings and competencies identified for entry into post-secondary programs that may or may not require the study of theoretical calculus. Curricular Content includes powers, prime factorization, functions, linear relations and systems, trigonometry, polynomials and financial literacy. Curricular Competencies (reasoning, problem solving, communicating, connecting and reflecting) are experienced through the content of this course.

Pre-Calculus 11

This course is designed to provide students with developing the mathematical understandings and competencies identified for entry into post-secondary programs that require the study of theoretical calculus. Curricular content include: radicals, polynomials, quadratic functions, and trigonometry. Curricular Competencies (reasoning, problem solving, communicating, connecting and reflecting) are experienced through the content of this course.

Foundations of Math 11

This course is designed to provide students with developing mathematical understandings and competencies identified for post-secondary studies in programs that do not require the study of theoretical calculus. Topics include logical reasoning, geometry, measurement, relations and functions, and statistics. Curricular Competencies (reasoning, problem solving, communicating, connecting and reflecting) are experienced through the content of this course.

Pre-Calculus 12

This course is designed to provide students with developing the mathematical understandings and competencies identified for entry into post-secondary programs that require the study of theoretical calculus. Curricular Content expands functions and equations to include polynomial, exponential, logarithmic, and trigonometric. Curricular Competencies (reasoning, problem solving, communicating, connecting and reflecting) are experienced through the content of this course.

Calculus 12

This course is designed to provide students with developing the mathematical understandings and competencies as a preview to post-secondary Calculus. Curricular content includes limits, derivatives and integration. Curricular

Competencies (reasoning, problem solving, communication, connecting and reflecting) are experienced through the content of this course.

Foreign Languages

Introductory French 11 (no prerequisites needed)

Introductory Grade 11 French is designed especially for students who have not previously studied that particular language in Grades 5 to 10. It is an intensive learning experience designed to provide students with an introduction to the language and culture being studied, and to provide a solid foundation for further study. Introductory Grade 11 incorporates material from the prescribed learning outcomes, suggested instructional strategies, suggested assessment strategies, and recommended learning resources identified for Grades 5 to 10. This reflects the fact that Introductory Grade 11 is designed to provide students with an equivalent preparation for Grade 11 and Grade 12 courses. A major consideration, therefore, is to relate the emerging language skills of students who are new to the study of the language to their actual ages, real-life experiences, and prior knowledge.

Core French 10

Core French 10 focuses on developing communication competencies in the French language, exploring Francophone communities and cultures within Canada and around the world, exploring identity, and engaging in the range of opportunities and experiences that developing proficiency in French provides.

French 11

Core French 11 focuses on developing communication competencies in the French language, exploring Francophone communities and cultures within Canada and around the world, exploring identity, and engaging in the range of opportunities and experiences that developing proficiency in French provides.

French 12

Core French 12 focuses on developing communication competencies in the French language, exploring Francophone communities and cultures within Canada and around the world, exploring identity, and engaging in the range of opportunities and experiences that developing proficiency in French provides.

Introductory German 11 (no prerequisites needed)

Focus is on phonemes, cognates and declination, with a strong cultural component, both locally and world-wide.

German 10

German 10 focuses on phonemes, cognates and declinations, with a strong cultural component, both locally and world-wide.

German 11

German 11 Focus is on phonemes, cognates and declination, with a strong cultural component, both locally and world-wide.

German 12

German 12 Focus is on phonemes, cognates and declination, with a strong cultural component, both locally and world-wide.

Introductory Mandarin 11 (no prerequisites needed)

Focus is on phonetic systems, Zhuyin and Pinyin, tonal variations, strokes and structure, and the many Chinese language varieties and dialects, plus a strong cultural component, both locally and worldwide.

Mandarin 12

Focus is on phonetic systems, Zhuyin and Pinyin, tonal variations, strokes and structure, and the many Chinese language varieties and dialects, plus a strong cultural component, both locally and worldwide.

Physical Education

Physical Health Education 10

Physical and Health Education 10 combines physical activity and health education to help students develop both physical and mental health. Key topics include engaging in a variety of physical activities, building healthy relationships, and preventing themselves or others from experiencing bullying or harassment.

Fitness and Conditioning 11

This course is designed for students who are more serious about improving their physical fitness through things like strength training or more intensive cardio. Fitness and Conditioning teaches students about the basics of anatomy, proper nutrition for training, and how to work out different parts of the body to train for different activities. This course is somewhat more specialized than Active Living 11 and 12 and would likely require access to specific equipment and facilities.

Fitness and Conditioning 12

This course is designed for students who are more serious about improving their physical fitness through things like strength training or more intensive cardio. Fitness and Conditioning teaches students about the basics of anatomy, proper nutrition for training, and how to work out different parts of the body to train for different activities. This course is somewhat more specialized than Active Living 11 and 12 and would likely require access to specific equipment and facilities.

Career Education

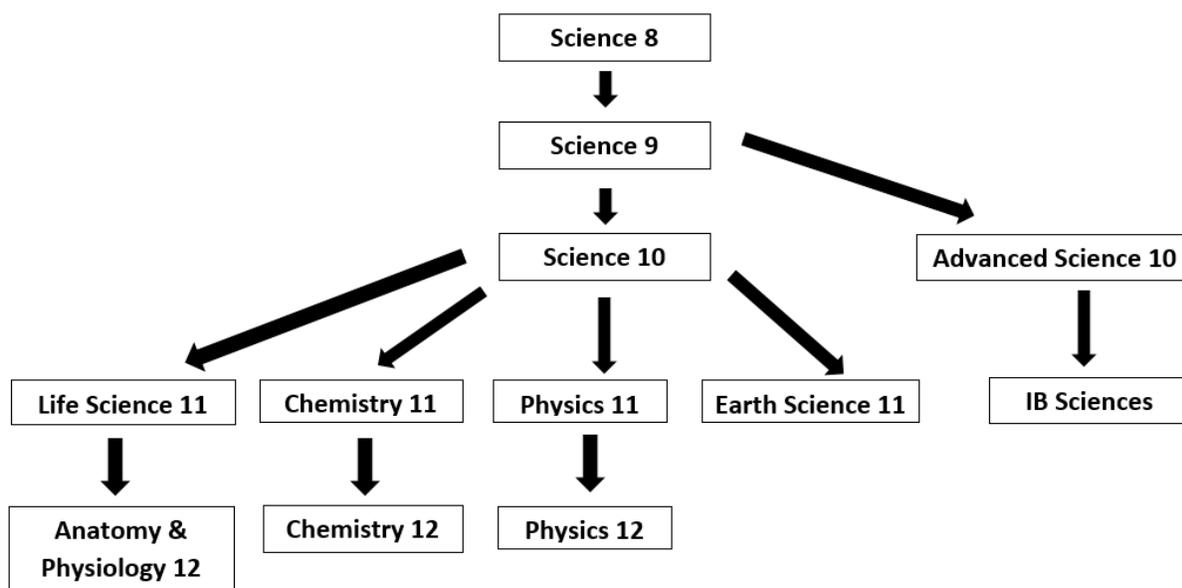
Career Life Education

Career-Life Education supports students in becoming successful, educated citizens by helping them learn how to effectively manage their life journey toward preferred future possibilities. It focuses on gaining a clear understanding of career-life development knowledge, skills, and strategies for life's journey into adulthood, and includes the exploration of career-life possibilities for adult life, such as roles, opportunities, and community resources, examination of ways to publicly represent ourselves both face-to-face and in digital environments, the practising of inclusive and respectful interactions for various community and work-related contexts, connecting and engaging with supportive community members, and researching post-graduation options and planning resources, such as labour market trends, budgeting tools, and workplace safety guidelines.

Career Life Connections

Career Life Connections requires students to identify and develop personal interests, passions and goals. Students reflect on learning experiences and competency development in school and community, build confidence in their contributions, and explore roles and possibilities in personal, education, and work life contexts. They develop and apply the personal management skills needed to pursue who and how they want to be in the world. This offering also facilitates community networking and experiential learning both inside and outside of school.

Sciences



Science 8 and Science 9

The curriculum for Science 8 to 10 is grouped under four general topics. Processes of Science include skills such as observing, classifying, predicting, inferring, and hypothesizing. Scientific reasoning, critical thinking, and decision making are also part of that foundation. Students in Science 8 to 10 are building on skills and processes that they have been developing from Kindergarten through to Grade 7. These will mostly be developed as part of work related to the other curriculum organizers (e.g., understanding how microscopes work and learning how to use them will occur in relation to the study of optics and the study of life science topics such as cells and microorganisms). Life Sciences embraces a range of biology topics, moving from the microscopic level (the study of cellular processes and how these relate to tissues, organ systems in organisms, and reproduction) to the macroscopic level (the study of ecological complexity and the diversity, continuity, interactions, and balance among organisms and their environments). Physical Sciences at the 8 to 10 level incorporates a series of topics that give students a foundation for understanding Physics (via a focus on optics, fluids, electricity, and motion) and Chemistry (via a focus on atoms, elements, and chemical reactions). Two main Physical Science topics are dealt with in each year of the 8 to 10 program. Earth and Space Science is a complement to the study of topics in other areas of science (especially Physical Science), and gives students an opportunity to examine some of the macroscopic applications of scientific principles and technologies in the study of terrestrial and extra-terrestrial systems.

Science 10

Science 10 is a broad-based course in which students investigate genetics and inheritance, chemical reactions, transformation of energy into different forms as well as the global and local impacts of energy use, and the formation of the universe.

Advanced Science 10

The topics of this course will be explored in more depth than those in Science 10.

Life Science 11

Life Sciences 11 is an introduction to the study of living things. Students will explore process of evolution, taxonomy and how organisms function in their environment.

Chemistry 11

Chemistry 11 investigates matter and its interactions. This laboratory-based course focuses on atoms and molecules, organic chemistry, chemical reactions and solutions, using measurement and quantitative problem-solving.

Physics 11

Physics 11 is a hands-on science course that investigates physical phenomena, including motion, contact forces and mechanical waves. Conservation of energy is explored through mechanics, thermodynamics and electric circuits.

Anatomy and Physiology 12

Anatomy and Physiology 12 focuses on the relationships between form and function of body systems. Students will explore the macro and micro aspects of these interactions, and how body processes integrate to maintain homeostasis.

Chemistry 12

Chemistry 12 is a laboratory-based course that explores aspects of physical chemistry through the investigation of reaction kinetics and the dynamic equilibrium involved in solution chemistry, acid-base systems and oxidation-reduction reactions.

Physics 12

Physics 12 is a science course that moves from concrete to conceptual understandings of physical phenomena. Students will explore the classical mechanics of relative motion, forces, fields and momentum. Students will also investigate modern physics including special relativity, fundamental forces and wave-particle duality..

Social Studies

Social Studies 8

Development and decline of civilizations from A.D. 500 – 1600: Medieval and renaissance societies; daily life and belief systems; cultural transmission and adaption; evolution of legal and governmental systems; early economic systems; impact of trade and commerce; impact of science and technology world geography; population distribution and resource use; exploration of places and ideas.

Social Studies 9

History of Canada to 1815: Nation building and social order in Europe; Industrialization in Europe and North America; Colonialism, imperialism, and nationalism; Relationship between aboriginal Canadians and European settlers; growth of fur trade; geographic regions of North America development of individual and group identity.

Social Studies 10

Social Studies 10 examines topics in modern Canadian and world history, including Canada's transformation from British dominion to independent nation, development of human rights in Canada and around the world, and major international conflicts.

Explorations of Social Studies 11

Explorations in Social Studies 11 is a flexible course that allows teachers to combine at least 3 of the different content learning standards and big ideas in a variety of ways. This allows teachers to create a wide variety of different courses to meet different student needs and interests.

Law Studies 12

Major topics include the Canadian constitution and system of government, aspects of criminal and civil law, and the correctional system in Canada.

Economic Theory 12

Economic Theory 12 is a course that examines the development of economic thinking from past to the present, such as the contributions of major thinkers like Adam Smith, Karl Marx, and JM Keynes.

Human Geography 12

Human Geography 12 examines relationships between humans and the environment. Key topics include the use of natural resources, the impact of the physical environment on cultural development, and demographic patterns of human societies.

Physical Geography 12

Key topics include different climate systems and biomes, natural disasters and plate tectonics, and the equilibrium between various natural systems.

Applied Design, Skills, and Technologies (ADST)

Arts Education

Art Studio 10

Students move beyond basic techniques and media, and explore a broad spectrum of new materials, technologies, and processes in various ways. Students continue to develop skills in both 2D and 3D media, and learn about image development through sharing traditions, perspectives, worldviews, and stories.

Art Studio 11

Students focus on refining techniques and media while continuing to explore a broad spectrum of new materials, technologies, and processes in various ways. Students continue to develop skills in both 2D and 3D media, selecting and combining them in more sophisticated ways. They will learn about reflecting the interconnectedness of the individual, community, history and society through art making. Students will also begin exploring art related careers.

Art Studio 12

Students focus on refining techniques and media while continuing to explore a broad spectrum of new materials, technologies, and processes in various ways. Students will increase their independence as they examine the interrelationships between 2D and 3D media through the creation a personal body of work. They will explore how art making reveals insights into the human experience and has the power to effect change. Students will also begin exploring opportunities and career pathways of professional artists.

Drama 10

Drama 10 focuses on forms and conventions for drama and theatre, as well as dramatic arts from various cultures. Students engage individually and collaboratively with forms and conventions of both drama and theatre. Students explore dramatic arts from various cultures, and analyze how the knowledge and skills developed in drama are related to understanding their personal and cultural connections.

Drama 11

Students develop dramatic skills individually and collaboratively using forms and conventions of both drama and theatre to gain a deeper understanding of themselves, and the world.

Drama 12

Students refine dramatic skills individually and collaboratively using forms and conventions of both drama and theatre. Students explore dramatic arts from various cultures, and analyse how the knowledge and skills developed in drama are related to understanding their personal skills, social awareness, and goals beyond secondary school.

Film & Television 11

Students study and apply pre-production, production and post production processes, strategies, techniques and technologies.

Film & Television 12

Students study and refine pre-production, production and post production processes, strategies, techniques and technologies. Students also explore career possibilities in the film and television industry, and emerging media.

Business Education

Entrepreneurship and Marketing 10

Entrepreneurship and Marketing 10 is an ADST course that combines entrepreneurship opportunity with marketing practice, including business and product development from invention and innovation to the marketplace.

Entrepreneurship 12

This course prepares individuals to perform marketing and management functions and tasks associated with owning and operating a business.

Food Studies 10

Food Studies 10 is an ADST course that focuses on meal preparation, eating practices, and well-being; food systems and nutritional trends; First Peoples food protocols.

Food Studies 11

This course focuses on meal design and preparation, recipe modification, and food systems and security. Learning includes exploration of First Peoples food guides, Canadian food labelling guidelines, and how food promotion and marketing practices impact diverse groups of people.

Food Studies 12

This course addresses complex recipe and multi-course meal design and preparation. Learning includes food justice topics, indigenous food sovereignty of peoples around the world, and future career opportunities in food services and production.

Media Design 10

Media Design 10 is an ADST course that focuses on design using technology-based media, including techniques for creating stories and points of view in images and influences of digital media in communications and self-expression.

Media Design 11

This course focuses on storytelling and showcasing personal viewpoints through the use of technology-based media. Learning includes exploration of multiple cultural perspectives, image- development, and design strategies.

Media Design 12

This course focuses on more complex technology-based media to represent multiple voices and cultural beliefs, histories, and traditions. Learning includes ways to engage the audience in construction of content and how to use media for social advocacy.