

2026-2027

High School Course Offerings



"Be who you are and be that well, to give honor to
the Master Craftsman whose handiwork you are."

- St. Francis de Sales



GRADE 10 CORE COURSE OFFERINGS

The Centre for
LEARNING
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Semester Offerings:

1=Semester 1 2=Semester 2 L=Full Year

English Language Arts

Course	Credits	Semester Offerings
English 10-1	5	1, 2
English 10-2	5	2

Social Studies

Social Studies 10-1	5	1, 2
Social Studies 10-2	5	1

Mathematics

Math 10-C	5	1, 2
Math 10-3	5	2
Math 15	5	1

Sciences

Science 10	5	1, 2
Science 14	5	1



GRADE 11 CORE COURSE OFFERINGS

Semester Offerings: 1 = Semester 1 2 = Semester 2 L=Full Year

Please see pre-requisites in red.

English Language Arts

Course	Credits	Semester Offerings
English 20-1 (PRE-REQ: English 10-1)	5	1, 2
English 20-2 (PRE-REQ: English 10-2 or 10-1)	5	1,2

Social Studies

Social Studies 20-1 (PRE-REQ: Social Studies 10-1)	5	1, 2
Social Studies 20-2 (PRE-REQ: Social Studies 10-2 or 10-1)	5	1, 2

Mathematics

Math 20-1 (PRE-REQ: Math 10C)	5	1, 2
Math 20-2 (PRE-REQ: Math 10C)	5	1, 2
Math 20-3 (PRE-REQ: Math 10-3 or 10C)	5	1

Sciences

Biology 20 Chem 20 (PRE-REQ: Science 10)	5	1, 2
Science 20 (PRE-REQ: Science 10)	5	1
Physics 20 (PRE-REQ: Science 10; Math 20-1 highly recommended)	5	2
Science 24 (PRE-REQ: Science 14 or 10)	5	2



GRADE 12 CORE COURSES



Semester Offerings: 1 = Semester 1 2 = Semester 2 L = Full Year
Please see pre-requisites in red.

English Language Arts

Course	Credits	Semester Offerings
English 30-1 (PRE-REQ: English 20-1)	5	1, 2
English 30-2 (PRE-REQ: English 20-2 or 20-1)	5	1,2

Social Studies

Social Studies 30-1 (PRE-REQ: Social Studies 20-1)	5	1, 2
Social Studies 30-2 (PRE-REQ: Social Studies 20-2 or 20-1)	5	1, 2

Mathematics

Math 30-1 (PRE-REQ: Math 20-1)	5	1, 2
Math 30-2 (PRE-REQ: Math 20-2 or 20-1)	5	1, 2
Math 30-3 (PRE-REQ: Math 20-3, 20-2, or 20-1)	5	2
Math 31 (PRE-REQ: Math 30-1 is a prerequisite or co-requisite)	5	2

Sciences

Biology 30 (PRE-REQ: Biology 20)	5	1, 2
Chemistry 30 (PRE-REQ: Chemistry 20)	5	1, 2
Physics 30 (PRE-REQ: Physics 20)	5	2
Science 30 (PRE-REQ: Science 20 or Bio, Phys & Chem to 20-level)	5	2

Semester Offerings: 1=Semester 1 2=Semester 2 L=Full Year

Please see pre-requisites in red. ^Required for the Alberta HS Diploma

Course	Credits	Semester Offerings
CALM 20		
CALM 20^ (CAREER & LIFE MANAGEMENT)	3	L
Physical Education		
Physical Education 10^, 20, 30 (PRE-REQ: Student must complete PE 10-20-30 sequentially)	5	L
Exploring Second Languages & Creative Arts		
*All courses marked with this symbol have a pre-requisite and must be completed sequentially (e.g. Art 10-20-30)		
Art 10, 20*, 30* General Music 10 Media & Cinema 15	5	L
French 20-3Y* Spanish 10-3Y, Spanish 20-3Y* Creative Writing & Publishing 15	5	1
French 10-3Y, French 30-3Y* Spanish 30-3Y* Creative Writing & Publishing 25*, 35*	5	2
Religious Studies Catholic 15-25-35	3	1, 2
Exploring Scientific Studies		
Personal & General Psychology 20	6	1
Forensic Studies 35 (PRE-REQ: Forensic Studies 25)	3	1
Forensic Studies 25 (PRE-REQ: Science 10 or 14) Experimental Psychology 30 Astronomy 15	3	2
Exploring Hands-on Learning		
Special Projects 10, 20, 30 Work Experience 15, 25, 35 (PRE-REQ: HCS 3000 - Workplace Safety Systems) Green Certificate (PRE-REQ: AGR 3000 - Agricultural Safety) RAP (Registered Apprenticeship Program) (PRE-REQ: HCS 3000 - Workplace Safety Systems)	The number of earned credits will vary.	L
Computing Science		
Introduction to Artificial Intelligence 15 LDC 1026	5	L

NEW!

26-27 CAREER & TECHNOLOGY STUDIES (CTS)



All Career & Technology Studies (CTS) courses are full-year (linear). Students co-enrolled in a course and its pre-requisite will need to complete the pre-requisite course(s) first. All CTS course are worth 1-credit each.

Agriculture	Financial Management
AGR 1040 - Animal Basics AGR 3000 - Agricultural Safety	FIN 1010 - Personal Financial Information FIN 1015 - Accounting Prep FIN 1020 - Accounting Cycle 1 (PRE-REQ: FIN 1015) FIN 1030 - Accounting Cycle 2 (PRE-REQ: FIN 1015 & FIN 1020)
Communications *COM1005 is a Pre-Req for all Comm modules	Community Care Services
COM 1005 - Visual Composition	CCS 3110 - Early Learning & Child Care 1 CCS 3120 - Early Learning & Child Care 2 (PRE-REQ: CCS 3110) CCS 3130 - Early Learning & Child Care 3 (PRE-REQ: CCS 3120) CCS 3140 - Early Learning & Child Care 4 (PRE-REQ: CCS 3130) CCS 3150 - Early Learning & Child Care 5 (PRE-REQ: CCS 3140)
Computers	Design Studies
CSE 1010 - Computer Science 1 CSE 1110 - Structured Programming 1 CSE 1120 - Structured Programming 2 (PRE-REQ: CSE 1110) CSE1240 - Robotic Programming 1	DES 1010 - Sketch, Draw & Model DES1020 - The Design Process DES1030 - 2 D Design Fundamentals (PRE-REQ: DES1020) DES1040 - 3 D Design Fundamentals (PRE-REQ: DES1020) DES1050 - CAD 1
Electro-Technologies	Health Care Services
ELT1010 - Electro Assembly 1 ELT 1130 - Robotics 1 ELT2140 - Robotics 2 (PRE-REQ: ELT 1130)	HSS1010 - Health Services Foundations HCS2020 - First Aid/CPR with AED - Online CPR HCS3040 - Child Care First Aid
Foods	Foods
FOD 1010 - Food Basics FOD 1020 - Contemporary Baking (PRE-REQ: FOD 1010) FOD 1030 - Snacks and Appetizers (PRE-REQ: FOD 1010) FOD1040 - Meal Planning (PRE-REQ: FOD 1010) FOD 1060 - Canadian Heritage Foods (PRE-REQ: FOD 1010) FOD 2040- Cake and Pastry (PRE-REQ: FOD1010)	FOD3020 - Nutrition & Digestion (PRE-REQ: FOD 1010) FOD3030 - Creative Baking (PRE-REQ: FOD 1010) FOD 3060 - Food Presentation (PRE-REQ: FOD 1010) FOD 3100 - Entertaining with Food (PRE-REQ: FOD 1010) FOD3160 - Regional Cuisine (PRE-REQ: FOD 1010)
Information Processing	Fashion Studies
INF 1030 - Word Processing 1 INF 1060 - Spreadsheets 1 INF 2020 - Keyboarding INF 2050 - Word Processing 2 INF3060 - Word Processing 3 (PRE-REQ: INF 2050)	FAS 1030 - Sewing Fundamentals

All Career & Technology Studies (CTS) courses are full-year (linear). Students co-enrolled in a course and its pre-requisite will need to complete the pre-requisite course(s) first. All CTS course are worth 1-credit each.

Legal Studies	Workplace Safety
LGS1010 - Private Law LGS3010 - Property Law LGS3040 - Negligence LGS3070 - Landmark Decisions LGS3080 - Criminal Law	HCS3000 - Workplace Safety Systems HCS3010 - Workplace Safety Practices (PRE-REQ: HCS3000)
Wildlife	
WLD 1010 - Introduction to Wildlife WLD 1020 - Wildlife Diversity WLD 1070 - Hunting and Game Management ~ WLD 1075 - Bowhunting Education ~ WLD 1080 - Angling & Fish Management ~ (~Student must register for WLD 1070, WLD 1075 and WLD 1080 & complete them concurrently) WLD 1090 - Boating Safety	

Please refer to this booklet for information about CTS course content & delivery. For additional information regarding CTS, please refer to Alberta Education's website: <https://education.alberta.ca/career-and-technology-studies/programs-of-study/?searchMode=3>

Each CTS course is worth 1 high school credit



COURSE DESCRIPTIONS

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Core Courses

Please click on course name to review
the course information.

ENGLISH 10-20-30

SOCIAL STUDIES 10-20-30

MATH 10-20-30

MATH AND SCIENCE LS

SCIENCES 10-20-30

PHYS ED 10-20-30

CAREER & LIFE MANAGEMENT 20



Exploring Second Languages & the Creative Arts

ART 10-20-30

**CREATIVE WRITING &
PUBLISHING 15-25-35**

FRENCH 10-20-30

GENERAL MUSIC 10

MEDIA AND CINEMA 15

RELIGION 15-25-35

SPANISH 10-20-30



Exploring Scientific Studies

ASTRONOMY 15

FORENSIC STUDIES 25-35

PSYCHOLOGY 20-30

Exploring **Hands-on Learning**

GREEN CERTIFICATE

RAP 15-25-35

SPECIAL PROJECTS 10-20-30

WORK EXPERIENCE 15-25-35



Exploring Career & Technology Studies (CTS).

AGRICULTURE

COMMUNICATION TECHNOLOGY

COMMUNITY CARE SERVICES

COMPUTER SCIENCE

DESIGN STUDIES

ELECTRO-TECHNOLOGIES

FASHION STUDIES

FINANCIAL MANAGEMENT

FOODS

HEALTH CARE SERVICES

HUMAN & SOCIAL SERVICES

INFORMATION PROCESSING

LEGAL STUDIES

WILDLIFE



LEARNING @HOME



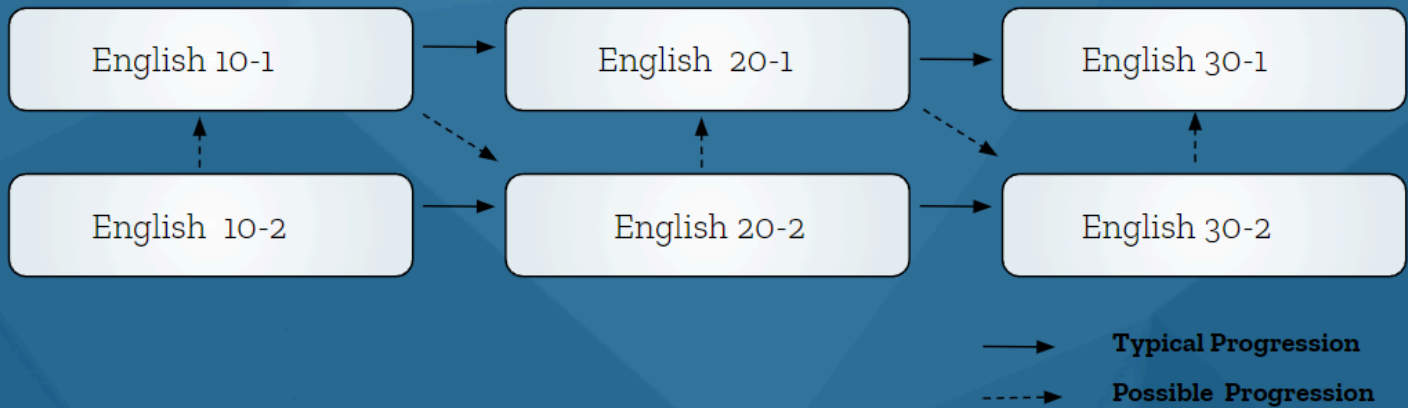
A highly-engaging online learning experience with outstanding academic results!

High School Program Features: Core Course Instruction

- Alberta-certificated teachers provide interactive web-based lessons, delivered through our Learning Management System
- To support our web-based lessons, teachers provide daily live instruction using conferencing software
- Live sessions are predominantly scheduled during the mornings to provide your family with flexibility
- Teachers typically structure their courses according to weekly-paced deadlines and scheduled test dates
- Teacher support is available via our Learning Management System, telephone, and email



English Language Arts



English 10-20-30 Progression

The English -1 course sequence is highly recommended for students who may be interested in university as English 30-1 can be a requirement for most university degree admissions. The -1 course sequence will involve enhanced expectations for rigour and sophistication with regards to literary text complexity, analysis, discussion, and writing.

The English -2 course sequence can prepare students for pathways including many college or technical institute programs, the trades, or the workplace. Students will read a variety of forms of literature; the analysis and writing components of the course will emphasize more practical and functional approaches.



English Language Arts

English Language Arts 10-1 (5 Credits)

Provided Resources for the previous school year: *Romeo & Juliet* by William Shakespeare, *To Kill a Mockingbird* by Harper Lee

I want to explore literature and develop strong communication skills. In ELA 10-1, students analyze and respond to literature, including extended texts (a novel/nonfiction book, a feature film and a modern or Shakespearean play) and shorter texts (poetry, short stories, visuals and multimedia, and essays) that relate to cultural and societal issues in Canadian and global contexts. They also create their own texts; e.g., fiction, nonfiction, poetry, presentations/media. This course is for students considering careers that require strong reading and communication skills and for those who may be interested in post-secondary education.

English Language Arts 10-2 (5 Credits)

Provided Resources for the previous school year: *Crossroads 10*, *ELA Handbook for Secondary Students*, *Dare* by Marilyn Halvorson

I want to begin to study material I am comfortable with and communicate well with others. In ELA 10-2, students with diverse abilities and goals study different types of texts, written at various levels, that explore issues in Canadian and global contexts. They study extended texts (a novel or nonfiction book, a feature film, and a modern or Shakespearean play) and shorter texts (poetry, short stories, visuals and multimedia, and popular nonfiction). Students are also encouraged to create their own texts; e.g., fiction, nonfiction and reports, poetry, and presentations/media. Material will often have daily life or practical applications for students. This course is designed for students considering careers that require basic reading and communication skills and for those interested in a range of post-secondary education or other opportunities.

English Language Arts

English Language Art 20-1 (5 Credits)

Provided Resources for the previous school year: The Norton Introduction to Literature, Macbeth by William Shakespeare, My Name is Asher Lev by Chaim Potok

I want to explore literature more deeply and develop my communication skills. In ELA 20-1, students analyze and respond to literature, including extended texts (a novel, a nonfiction book or feature film, and a Shakespearean play) and shorter texts (poetry, short stories, visuals and multimedia, and essays) that relate to cultural and societal issues in Canadian and global contexts. They also create their own texts; e.g., fiction, nonfiction/persuasive writing, presentations/media, scripts. This course is for students considering careers that require strong reading and communication skills and for those who may be interested in post-secondary education

English Language Art 20-2 (5 Credits)

Provided Resources for the previous school year: Echoes 11, Canadian Writers' Handbook, Lord of the Flies

I want to continue to study material that is relevant to my life and that strengthens my communication with others. In ELA 20-2, students with diverse abilities and goals study different types of texts, written at various levels, that explore issues in Canadian and global contexts. They study extended texts (a novel, a nonfiction book or feature film, and a modern or Shakespearean play) and shorter texts (poetry, short stories, visuals and multimedia, and popular nonfiction). Students are also encouraged to create their own texts; e.g., fiction, nonfiction and proposals, scripts, and presentations/media. Material will often have daily life or practical applications for students. This course is designed for students considering careers that require basic reading and communication skills and for those interested in a range of post-secondary education or other opportunities.

English Language Arts

English Language Art 30-1 (5 Credits)

Provided Resources for the previous school year: Viewpoints 12, Reference Points, Night by Elie Wiesel, Hamlet by William Shakespeare, Wuthering Heights by Emily Bronte

I want to demonstrate critical thinking about literature and communication. In ELA 30-1, students analyze and respond to literature, including extended texts (a novel or nonfiction book, a feature film or modern play, and a Shakespearean play) and shorter texts (poetry, short stories, visuals and multimedia, essays, and popular nonfiction) that relate to cultural and societal issues in Canadian and global contexts. They also create their own texts; e.g., fiction, nonfiction/persuasive writing, presentations/media. This course is for students considering careers that may require strong reading and communication skills and for those interested in post-secondary education.

English Language Art 30-2(5 Credits)

Provided Resources for the previous school year: Between the Lines, Tuesdays with Morrie by Mitch Albom

I have a deeper understanding of relevant materials and can communicate clearly with others. In ELA 30-2, students with diverse abilities and goals study different types of texts, written at various levels, that explore issues in Canadian and global contexts. They study extended texts (a novel or nonfiction book, a feature film, and a modern or Shakespearean play) and shorter texts (poetry, short stories, visuals and multimedia, essays, and popular nonfiction). Students are also encouraged to create their own texts; e.g., fiction, nonfiction, presentations/media. Material will often have daily life or practical applications for students. This course is designed for students considering careers that require basic reading and communication skills and for those interested in a range of post-secondary education or other opportunities.

Social Studies



Social Studies Progression (10-20-30)

For each grade, you will notice that both course sequences cover the same topic; for example, both Social 10-1 and Social 10-2 focus on globalization. You may wonder, what is the difference between the -1 and -2 course sequences?

The -1 course sequence will explore the content focus with greater rigor and depth with enhanced writing demands. As well, an emphasis is placed on the academic skills of analysis, evaluation, and synthesis. In other words, students can expect to see a greater emphasis on how to apply concepts, with specific reference to social studies content, when interpreting a variety of primary and secondary sources.



Social Studies

Social Studies 10-1 (5 Credits)

Provided Resources for the previous school year: Exploring Globalization

What is globalization and how does it affect us? Social Studies 10-1 students explore the changing meaning of identity and citizenship in a globalizing world, while also understanding the impacts of globalization, both positive and negative, on people worldwide.

Social Studies 10-2 (5 Credits)

Provided Resources for the previous school year: Living in a Globalizing World

What is globalization and how does it impact me? Social Studies 10-2 students explore the history and effects of globalization. They develop an understanding of the impact that globalization has on people's identity and citizenship, while addressing emerging issues that globalization presents.



Social Studies

Social Studies 20-1 (5 Credits)

Provided Resources for the previous school year: Exploring Nationalism

What is nationalism and how does it affect us? Social Studies 20-1 students look at origins and effects of nationalism and weigh its benefits and limitations. They examine issues related to nationalism and consider impacts on individuals, international relations and citizenship.

Social Studies 20-2 (5 Credits)

Provided Resources for the previous school year: Understanding Nationalism

What is nationalism and how does it affect me? In Social Studies 20-2 students examine the origins and effects of nationalism from various perspectives, developing an understanding of the impact of nationalism on individuals, international relations and citizenship in Canada.



Social Studies

Social Studies 30-1 (5 Credits)

Provided Resources for the previous school year: Perspectives on Ideology

What are ideologies and how do they affect us? Social Studies 30-1 students examine multiple perspectives on various ideologies and on the influence of these ideologies, focusing particularly on liberalism. They develop an understanding of how ideologies can shape us and our world.

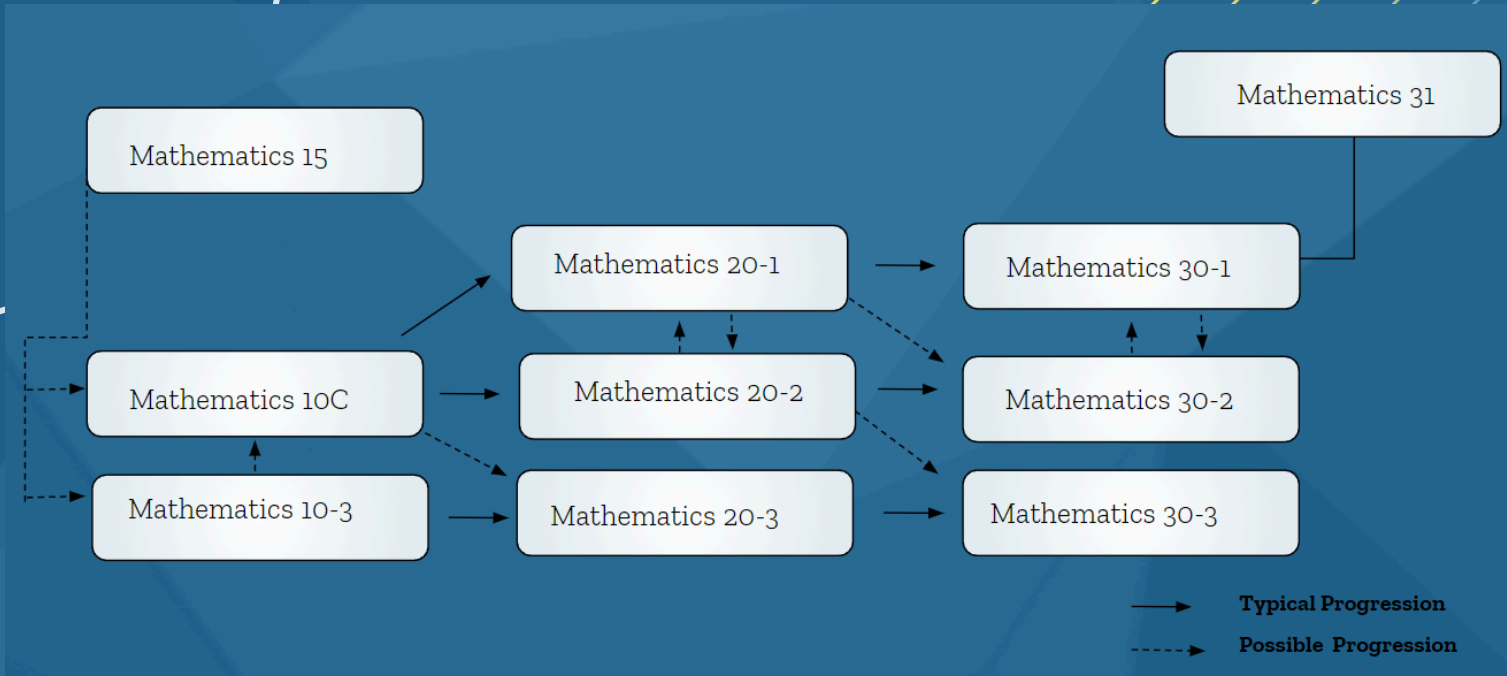
Social Studies 30-2 (5 Credits)

Provided Resources for the previous school year: Understanding Ideology

What are ideologies and how do they affect us? Social Studies 30-2 students will examine multiple perspectives on various ideologies, focusing in particular on liberalism. They will develop an understanding of how ideologies can shape us and our world.



Mathematics



Required resources for Mathematics 10C, -1 levels, -2 levels, and Mathematics 31:

Students will need to supply a TI-83, TI-84+, TI-84+C or TI Inspire calculator.

Required resources for Mathematics -3:

Students will need to supply any scientific calculator.



Mathematics

Mathematics Progression (Math 10-20-30)

To set students up for success with future opportunities, selecting a mathematics pathway involves multiple considerations regarding a student's current achievement, readiness, and goals. In grade 10, Mathematics 15 is recommended for students who would like to take Mathematics 10C, and would benefit from a review of foundational concepts covered in Mathematics 9. Students would register for Mathematics 15 in the first semester, and 10C in the second semester.

The Mathematics -3 course sequence is recommended for students pursuing pathways in the trades or workplace.

The Mathematics -1 course sequence is recommended for students pursuing post-secondary pathways that require calculus. Some examples include science degrees, computer science, engineering, and certain business programs.* A student may choose to take Mathematics 20-1 in grade 11, and then take Mathematics 30-2 in grade 12 once their goals are more clear.

The Mathematics -2 course sequence is recommended for students pursuing post-secondary pathways that do not require calculus. Although requirements vary, some examples include nursing, veterinary technologist, and a number of programs at technical institutes like SAIT and NAIT.*

Mathematics 31 (calculus) is often required for engineering, and highly recommended for students pursuing a science degree.*

*Post-secondary requirements can vary, so students must review admission requirements specific to their top schools and programs of interest.



LEARNING STRATEGY ENHANCED MATHEMATICS & SCIENCE

COURSE INFORMATION:

Students who enroll in our learning-strategy enhanced mathematics and science courses will receive 5-credits for successfully completing each core class, but they will also receive credit for learning strategies.* In addition to their math and science curriculum, students will receive subject-specific learning strategy instruction, covering topics such as test-taking, studying, and organizational strategies - and MORE!

With one additional live session once per week, students also receive additional synchronous instruction to cover the additional outcomes.

RATIONALE:

Strong numeracy skills are critical to many post-secondary and career pathways. As students advance into high school, they may need to adjust their study skills to match the pacing and rigor of courses.

In our learning-strategy enhanced courses, students receive explicit, targeted instruction in the study skills promotive of academic achievement, embedded in additional, synchronous practice with one of our Alberta-certificated teachers. In mathematics and science, the keys to success are regular practice and teacher feedback. Start on the path to success with our enhanced learning strategies courses!

*If students take 1 learning-strategy-enhanced (LS) course they will receive 3 LS credits. If a student takes 2 LS courses, they will receive 5 LS credits. For example, if a student took Math 10C LS they would receive 5 credits for Math 10C + 3 LS credits. If they take Science 10 LS and Math 10C LS, they will receive 5 LS credits in addition to their course credits. LS Caps at 5 credits per year.

10 GRADE 10

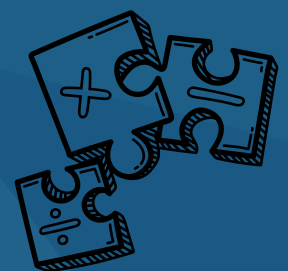
Choose from Mathematics 10 C LS & Science 10 LS.

11 GRADE 11

Choose from Mathematics 20-1 LS, Biology 20 LS, Chemistry 20 LS & Physics 20 LS

12 GRADE 12

Choose from Mathematics 30-1 LS, Biology 30 LS, Chemistry 30 LS & Physics 30 LS



Mathematics

Mathematics 15 (5 Credits) - Math 10 C Preparation Course

Provided resources for the previous school year: No required resources

To prepare for the transition to grade 10, students with basic or adequate achievement in Mathematics 9 may benefit from taking Math 15 prior to enrolling in Mathematics 10C.

Mathematics is a cumulative subject, which means that basic skills and concepts provide a foundation for more complex ones. This course aims to provide students with an opportunity to be successful in mathematics, reaching their full potential as engaged learners; students will learn and develop additional strategies, alternate approaches, and the resources necessary to prepare to enroll in Mathematics 10C.

Competencies in Mathematics 15 will cover topics including number sense, logical reasoning, measurement, algebra, graphical reasoning, statistics and probability. The course will enhance numeracy skills in students, develop their critical thinking and problem-solving abilities, and set them up for success in future courses in mathematics.

The topics covered in the course are those which will best serve as a bridge between Grade 9 Mathematics and Mathematics 10C. Thus, some of the topics we cover will review grade nine concepts, while others will branch into the Mathematics 10C curriculum in order to provide students with a foundation to enter grade 10.

Mathematics

Mathematics 10 C (5 Credits)

Provided Resources for the previous school year: Foundations and Pre-Calculus

Mathematics 10C students determine the surface area and volume of 3-D objects and use trigonometric ratios to solve problems involving right triangles. They simplify expressions that involve powers with integral and rational exponents and simplify or factor polynomial expressions. At this level, students also analyze linear relations, solve systems of linear equations and solve problems related to both of these sets of skills.

Mathematics 10-3 (5 Credits)

Provided resources for the previous school year: MathWorks 10

Mathematics 10-3 students solve linear and area measurement problems of 2-D shapes and 3-D objects using SI and imperial units. They use spatial reasoning to solve puzzles; solve problems involving right triangles and angles; solve unit pricing, currency exchange and income problems; and manipulate formulas to solve problems. They also use scale factors and parallel and perpendicular lines to solve problems.



Mathematics

Mathematics 20-1 (5 Credits)

Provided Resources for the previous school year: Pre-Calculus 11
Worktext

Mathematics 20-1 students investigate arithmetic and geometric patterns and use the sine and cosine laws to solve problems involving triangles. They investigate the properties of radical and rational expressions. Mathematics 20-1 students also analyze the characteristics of absolute value and quadratic functions, solve quadratic equations and systems of equations in various ways, and analyze the relationship between a function and its reciprocal.

Mathematics 20-2 (5 Credits)

Provided resources for the previous school year: Foundations of Math 11 consumable

Mathematics 20-2 students use proportional reasoning to solve real-life problems involving 2-D shapes and 3-D objects. They use the properties of angles and triangles, including the sine and cosine laws, to solve problems; use reasoning to prove conjectures; use spatial reasoning to solve puzzles; and solve problems that involve radicals. They interpret statistical data, solve problems involving quadratics and research and present a mathematical topic of their choice.

Mathematics 20-3 (5 Credits)

Provided resources for the previous school year: Math Works 11

Mathematics 20-3 students solve surface area, volume and capacity problems. They use primary trigonometry to solve problems involving two or three right triangles, and model and draw 3-D objects and their views to scale. They use numerical reasoning to solve puzzles; create and analyze personal budgets; use proportional reasoning, unit analysis and manipulation of formulas to solve problems; and create and interpret graphs. Students use their understanding of slope and rate of change to interpret graphs.

Mathematics

Mathematics 30-1 (5 Credits)

Provided resources for the previous school year: Pre-Calculus 12
Worktext

Mathematics 30-1 students investigate the properties of logarithms; study the characteristics and transformations of trigonometric, polynomial, exponential and logarithmic functions by sketching and analyzing their graphs; and solve equations and problems related to these functions. Students also use basic counting principles to determine the number of permutations or combinations of the elements of a set to solve problems. This course is designed for students who are enrolling in engineering, mathematical science, and other science fields requiring intensive mathematics. Most students taking Mathematics 30-1 should consider enrolling in Mathematics 31.

Mathematics 31 (5 Credits)

Provided resources for the previous school year: No Resources
Required

Mathematics 31 students determine the limit of a function at finite or infinite values of the independent variable. They use derivative theorems to determine the derivative of a function, either explicitly or implicitly, and use derivatives to sketch graphs of functions and solve optimization problems. They also investigate the relationship between differentiation and integration. Students learn several methods of integration and apply them to finding the area under the curve and the volumes of revolution.

Mathematics

Mathematics 30-2 (5 Credits)

Provided resources for the previous school year: Foundations of Math 12 consumable

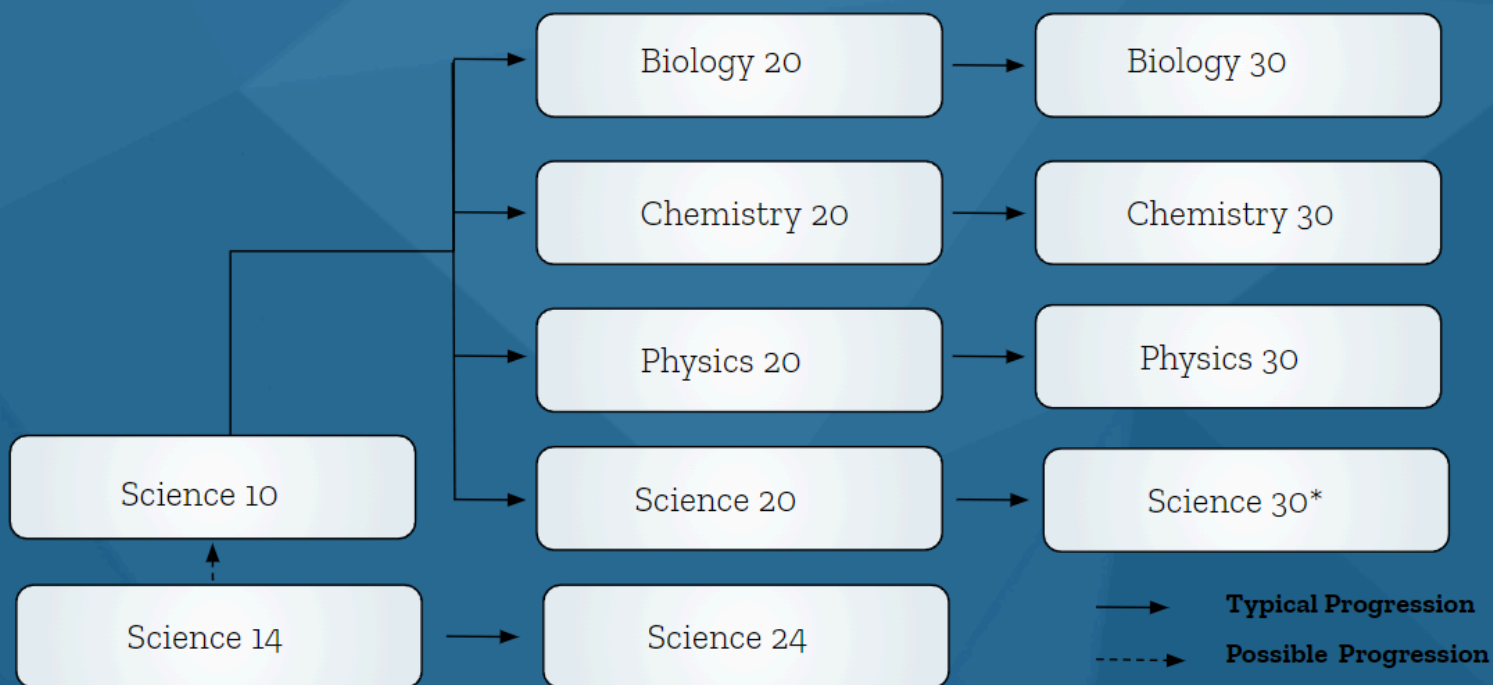
Mathematics 30-2 students use numerical and logical reasoning to solve puzzles, and solve real-life problems about the probability of events occurring. They solve problems algebraically involving rational equations; investigate exponential, logarithmic, polynomial and sinusoidal functions; and research and present a mathematical topic of their choice.

Mathematics 30-3 (5 Credits)

Provided resources for the previous school year: Math Works 12

Mathematics 30-3 students investigate the limitations of measuring instruments, use trigonometry to solve problems involving triangles, and describe and illustrate properties of polygons. They investigate slides, rotations, flips and size changes of 2-D shapes or 3-D objects; they use logical reasoning to solve puzzles; and they solve various other problems involving financial situations, linear relations and probability.

Science



Science Progression (Science 10-20-30)

The completion of science 10 is a requirement for many pathways within the trades. Science 10 is the pre-requisite for Biology 20, Chemistry 20, Physics 20, and Science 20.

If a student completes Science 14 in grade 10, they have completed the pre-requisite to take Science 24, which will allow them to complete the minimum science requirements for the Alberta High School diploma.

Post-secondary requirements can vary, so students are encouraged to build an awareness of admissions guidelines for their top schools of interest. For example, biology and chemistry provide a strong foundation for nursing and bio-chemistry pathways. Chemistry and physics provide a strong foundation for computer science and engineering. However, requirements for programs can vary; students are discouraged from prematurely foreclosing on science pathways.

*If a student has completed Biology 20, Chemistry 20 or Physics 20, they may register for Science 30 without Science 20.

Science

Science 10 (5 Credits)

Provided resources for the previous school year: No Resources Required

What happened to that energy? Science 10 students are introduced to the biological, chemical, physical and Earth sciences. By studying chemical reactions, cellular and multicellular processes that occur in plants, the conservation and conversion of energy, and Earth's climate, they discover how energy is transformed.

Science 14 (5 Credits)

Provided resources for the previous school year: Science Connect 1

How can we conserve energy? Science 14 students learn about the atom, the periodic table and the safe handling of chemicals. They investigate how energy is transferred in machines, and they examine the digestive and circulatory systems, including ways to keep these systems healthy. Students also explore how human activities influence the flow of matter and energy in the biosphere.

Science

Science 20 (5 Credits)

Provided Resources for the previous school year: Science 20

What changes do we see on Earth? Students in Science 20 extend their study of the biological, chemical, physical and Earth sciences and apply their knowledge to real-life problems. They investigate Newton's laws of motion, the properties of hydrocarbons and the chemistry of solutions. They examine evidence of how Earth's surface, climate and life forms have changed and continue to change and cycle in response to natural and human actions.

Science 24 (5 Credits)

Required Resources for the previous school year: No Resources Required

Science 24 students investigate common chemical reactions and examine energy conversions in biological, chemical, and technological systems. They learn about human health and the immune system. They also investigate the principles that describe the motion of objects and apply their knowledge to transportation safety.



Science

Biology 20 (5 Credits)

Provided Resources: Inquiry into Biology for the previous school year

How and why does energy flow through living systems? Biology 20 students examine the interactions of living systems to better understand the constant flow of energy and the cycling of matter. Specifically, students explore the functioning of the human body and the mechanisms that work to maintain balance in organisms—in ecosystems and in the biosphere.

Chemistry 20 (5 Credits)

Provided Resources for the previous school year: Inquiry into Chemistry

How do atoms combine to form different substances? Students explore matter and how it changes in order to understand the natural world. They investigate the chemical properties of solutions, and they apply their understanding of chemical bonds to explain ionic and molecular compounds. Chemistry 20 students explain the behaviour of gases, using the gas laws, and also work to balance chemical equations.

Physics 20 (5 Credits)

Provided Resources for the previous school year: Pearson Physics

How does a lacrosse player know when to release the ball? Physics 20 students investigate the motion of objects. They apply Newton's law of universal gravitation to astronomical observations. They also describe how energy is transmitted by mechanical waves and how waves relate to medical technologies, industry and musical instruments.



Science

Science 30 (5 Credits)

Required Resources for the previous school year: No Resources Required

How do we sustain our energy resources? Students sharpen their scientific skills and explore a wide range of scientific concepts to strengthen their foundations in science. They investigate human systems and health, and environmentally sustainable solutions for meeting global energy needs. They also examine the impacts of chemicals in society and the environment and examine the properties and applications of electromagnetic energy.

Biology 30 (5 Credits)

Provided Resources for the previous school year: Inquiry into Biology

Why is there so much diversity? Biology 30 students investigate how human systems sense and respond to the environment. They explore human reproduction and development at the cellular level and at the organism level. Students investigate the basic structure and role of DNA and investigate the inheritance of traits in individuals and populations. They analyze the changes in populations resulting from natural and human-induced changes in the environment and discover that living systems are dynamic.



Science

Chemistry 30 (5 Credits)

Provided Resources for the previous school year: Inquiry into Chemistry

How can you predict chemical equilibrium? Chemistry 30 students examine and quantify how thermochemical and electrochemical systems use or provide energy. They explore common organic compounds—those that contain carbon—and how they are used in technological applications and everyday life. Students also investigate acid-base reactions and interpret how they eventually reach equilibrium.

Physics 30 (5 Credits)

Provided Resources for the previous school year: Pearson Physics, SNAP Physics 30

When does a model or a theory need to change? Physics 30 students consider historical experiments and explore why the model of the atom has changed as a result of experiments and observations of natural phenomena. Students apply a quantitative approach to describe conservation of momentum in an isolated system, and they investigate applications and implications of electric and magnetic forces and fields. They also use the concept of wave-particle duality to understand both wave and photon behaviour of electromagnetic radiations.

Physical Education

Physical Education 10 (5 Credits)

This course is required to meet Alberta High School Diploma requirements. Students develop the skills and attitudes necessary for better health and well-being, embracing an active lifestyle. Students will complete 100 hours of physical activity across five different curricular dimensions: Alternative Environments, Dance, Games, Individual Activities, and Gymnastics. In addition, students complete a major project, set achievable goals, and other written tasks. Completion of Heart Saver CPR Level A is required for this level only.

Physical Education 20-30 (5 Credits)

Students continue to develop the skills and attitudes necessary for better health and well-being, embracing an active lifestyle. Students will complete 100 hours of physical activity across five different curricular dimensions: Alternative Environments, Dance, Games, Individual Activities, and Gymnastics. In addition, students complete a major project, set achievable goals, and other written tasks.

Career and Life Management

Career and Life Management 20 (3 Credits)

This course is required to meet Alberta High School Diploma requirements. Students learn to make well-informed, considered decisions. They explore behaviours and attitudes that will help them live healthy, happy lives. This course is structured according to three themes: (1) Personal Choices - emotional, psychological, social, spiritual and physical health (2) Resource Choices - financial resources and decision making (3) Career and Life Choices - skills for researching post-secondary requirements, career planning, and lifelong development. *This course includes sexual health.*

French & Spanish 10-20-30 3 Year Programs

French 10-3Y-20-3Y-30-3Y (5 Credits each)

Resources: Students will create a free account on the Duolingo application to supplement the provided online, web-based materials.

Students also will have one interactive live session per week to practice their French language skills.

This course sequence is designed for students with no prior instruction in French before entering high school. Students will learn to understand, speak, and write in French for various purposes across multiple contexts. Students will also learn about French culture so that they can express messages effectively.

Spanish 10-3Y-20-3Y-30-3Y (5 Credits each)

Resources: Students will create a free account on the Duolingo application to supplement the provided online, web-based materials.

Students also will have two interactive live sessions per week to practice their Spanish language skills.

This course sequence is designed for students with no prior instruction Spanish before entering high school. Students will learn to understand, speak, and write in Spanish for various purposes across multiple contexts. Students will acquire the knowledge, skills, and attitudes to be effective global citizens, through the exploration of cultures of the Spanish-speaking world.



If you have prior experience with French or Spanish, please contact your Student Services Coordinator to discuss placement assessments.

Religious Education 15-25-35

Roman Catholic

Religious Education 15: Christ in Culture (3 Credits)

Required Resources: Online textbook provided by teacher

The principal aim of Christ and Culture is to assist students, with the help of the Gospel, to participate as Christians in the shaping of our culture. The program explores major cultural issues from a Christological perspective. Beginning with their own life experiences, students acquire a deeper and more systematic knowledge of themselves, Christ's message, and the Church. Connections between the Church and contemporary culture are explored in terms of what it means to be a responsible adolescent developing as a member of a Catholic, Christian community while living within the context of a broader culture. Twenty percent of the course will also be spent studying how the stories, signs, symbols, and rituals from other World Religions and Canada's indigenous communities have influenced cultures both in Canada and throughout the world.

Religious Education 25: God's gift to Salvation (3 Credits)

Required Resources: Online textbook provided by teacher

Jesus Christ: God's Gift of Salvation invites students to deepen their relationship with Jesus through a study of Scripture. Students will explore the Jewish historical, religious, and cultural world into which the Messiah was born and the Old Testament covenant fulfilled. Using the Gospels as primary sources, the course explores Jesus' birth, early life, and ministry; his preaching of the Kingdom of God; his special teachings, particularly the parables; and his miracles. It then focuses on the scriptural accounts of his death and Resurrection, and the Ascension, and their central significance for the church's understanding of Jesus as the Christ, the Son of God.

Religious Education 15-25-35

Roman Catholic

Religious Education 35: God's gift to Salvation (3 Credits)

Required Resources: Online textbook provided by teacher

In Search of the Good challenges students to understand themselves as moral persons called to discipleship by living the way of Christ. Through an examination of ethical theories, the revelation of Sacred Scripture, and the lived experience and teaching of the Catholic Church, the course invites students to mature as active participants in their faith. At the heart of catechesis is the human search for happiness as the completion of the superabundant love of God. The same tension which exists between the revelation of God's love and the explorations of human reason are worked out in the areas of freedom, justice, human relations, ecology, reconciliation, life in community and political life. For twenty percent of the course, students will learn how other World Religions understand their own sacred texts as guides to moral living, plus how they approach current moral issues.



All Catholic Religion courses require 10 hours of community service.



Art 10-20-30

Students explore a variety of media and ways of expressing themselves visually. Exploring art and imagery across history and tradition, they will understand how images are designed. As your teen develops artistically, technically, and critically, they will discover how images evoke responses and interpretations through studying artists, past and present. In each course, students will complete required assignments; they will also have an opportunity to pursue their own artistic focus through a student-choice project at the end of the year. Students will experiment with ways to convey meaning through creating their own visual artwork in the following disciplines:

Art 10 (5 Credits)

Required Resources: drawing paper, art pencil set, white eraser, ruler, fine line black art pen, glue stick, scissors, coloured pencil set, acrylic paint set, two 8x10 canvases (or larger), paint brush set (flat and round), watercolour paint set, watercolour paper, masking tape.

Pen and ink; line, value, and depth in drawing; perspective; pointillism; introduction to colour theory; landscape painting; watercolours; acrylics; and alternative media sculpture.

Art 20 (5 Credits)

Required Resources: scissors, glue stick, white glue, ruler, drawing paper, art pencil set, one 11 x 17 (or larger) piece of paper, white eraser, coloured pencil set, acrylic paint set, one 8 X 10 canvas (or larger), watercolour paint set, watercolour paper, paint brush set (flat and round), cardboard.

Collage; drawing and painting the human form; sketching techniques; surrealism; monochromatic painting; colour theory; watercolours; acrylics; and abstract relief sculpture.



Art 10-20-30

Art 30 (5 Credits)

Required Resources: drawing paper, art pencil set, white eraser, acrylic paint set, paint brush set (flat and round), white glue, ruler, scissors, cardboard, tread or wire (optional: vine charcoal, watercolour or oil paints, watercolour paper, canvases)

Art 30 (5 credits)

Advanced drawing of the human form, with a focus on shading, depth, and value; abstract representation and communication arts through collage; study of art history and movements; creating art in a series using movement art; study of advanced colour theory and the elements of art; students will engage in a self-guided exploration of interests, resulting in the creation of a final artistic portfolio.

Creative Writing & Publishing

15-25-35

Creative Writing 15-25-35 (5 Credits each)

Required Resources: No required resources. To support web-based materials, student will have one interactive live-session per week

Creative Writing 35: Fahrenheit 451

By following their writing interests and passions, students will practice a variety of writing types such as poetry, children's picture books, and short story writing. Students will also investigate the publishing process - both traditional and independent publishing. As well, students will prepare a writing portfolio for submission as their final project. The feedback process, through peer and teacher interaction, is an integral component of this writing workshop.



Forensic Studies 25-35

Forensic Studies 25-35 (3 Credits each)

Required Resources: No required resources.

Students must complete Science 10 or Science 14 prior to taking Forensic Studies 25.



Students will investigate and evaluate the processes involved in the collection and preservation of crime scene evidence. As students delve into forensic studies, they will investigate and analyze the strengths and limitations of forensic evidence analysis. This course will focus on the ethical considerations involved in the use of forensic evidence. As well, students will explore a variety of occupations and potential career opportunities in the field of forensics.

Psychology 20-30

Personal & General Psychology 20 (6 Credits)

Required Resources: No required resources.

Are you interested in learning about the science of human behaviour? In this introductory psychology class, students learn about personality, behaviour, intelligence, heredity, biological influences, understanding perceptions, historical theories, principles of learning, thinking processes, conflict, emotional problems in adolescents, behaviour disorders, and careers in psychology.



Psychology 20-30

Experimental Psychology 30 (3 Credits)

Required Resources: No required resources.

This course provides an overview of the process of scientific experimentation in the field of psychology. The lessons deal with the scientific method, data display and interpretation, research ethics, research methods, and the design and completion of a practice experiment. Upon completion of the course, students have a basic understanding of the major concepts in Experimental Psychology and the complex nature of scientific research. An aptitude for science and basic statistics is required to be successful in this course.

Astronomy 15

Astronomy 15 (3 Credits)

Required Resources: No required resources.

Pre-Req Science 10 with minimum of 75%



Astronomy 15 is designed to help students explore countless connections among the historical knowledge of stars, human exploration, and technological advancements that improve our understanding of the planet, solar system, and universe.

This course combines aspects of the Sciences and the Social Sciences in order to offer an engaging and challenging opportunity to students. As the course progresses, students will engage in aspects of history, physics and other areas of study to better understand the complex and interdisciplinary nature of Astronomy.



Media & Cinema 15

NEW!

Media and Cinema 15

Required Resources: No required resources.

Media and Cinema 15 examines the history of the medium, including the development of production and exhibition technologies that broadened the impact of the subject matter. The course will also explore the way in which history is portrayed and presented in the media and cinema, as well as the significant changes throughout cinematic history.

Special Projects 10-20-30

Special Projects 10-20-30 (Variable Credit)

Students can earn 1,2,3,4, or 5 credits at each course level, based on 25 hours of work per credit. For special projects, students, as individuals or in small groups, become involved in the selection, planning, and organization of their own projects. They pursue activities in which they have considerable interest or ability, but are beyond the scope of the regular curriculum or the programs being offered in the school. To start this course, students submit a clearly planned proposal for approval.

If a special project is related to a specific school subject, the content of the project shall be distinct from and in addition to regular course requirements. Special projects credits cannot be awarded for student activities that would be considered a normal part of extracurricular or co-curricular activities generally offered by a school (e.g. school newspaper, yearbook). In instances where a student completes more than one special project, the projects must vary substantially from year to year or demonstrate increased levels of proficiency.

Student participation in a program or course offered by organizations external to Alberta Education is not considered a special project. As an exception, 4-H projects may qualify as special projects as long as they meet the requirements indicated. Please ensure you enroll in special projects before starting your 4-H project.

Intro to Artificial Intelligence

NEW!

Introduction to Artificial Intelligence 15

Required Resources: No required resources.

Various facets of artificial intelligence are integrated into our daily lives, and the algorithms power many of our apps. This course will explore the inner workings of artificial intelligence, and its transformative influence on our ever-evolving world.

General Music 10

General Music 10 (5 Credits)

General Music is a sequence of courses for students who are interested in a broad spectrum of musical experiences within a nonperformance-based environment but not interested in specializing in choral or instrumental performance.

General Music is comprised of three components:

1. **Music Making** - This accounts for $\frac{1}{5}$ of the course. Students can play any instrument, including voice, and may or may not be taking part in music lessons.
2. **Theory** - This accounts for $\frac{1}{5}$ of the course. Students do not require any prior theory knowledge to take General Music 10.
3. **Electives** - This accounts for the majority, $\frac{3}{5}$, of the course. During each level, students will complete elective projects in three of the following areas: Composition, History of Western Music, Music and Technology, World Music, Jazz Appreciation, Popular Music, and Careers in Music.

The teacher offers one 1 hour live interactive session per week, but attendance is optional. During these live sessions, the teacher will provide assistance with theory and also make music!



Off-Campus Education

The Centre for Learning@HOME offers a range of valuable hands-on learning opportunities in 3 Off Campus Education Programs.

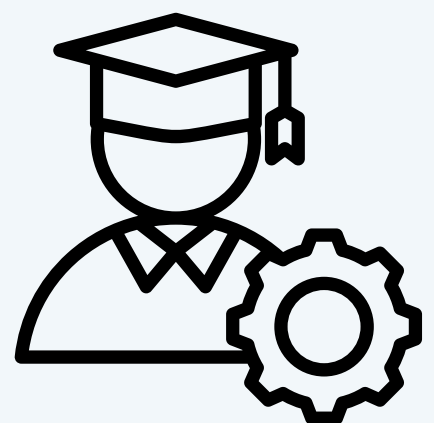
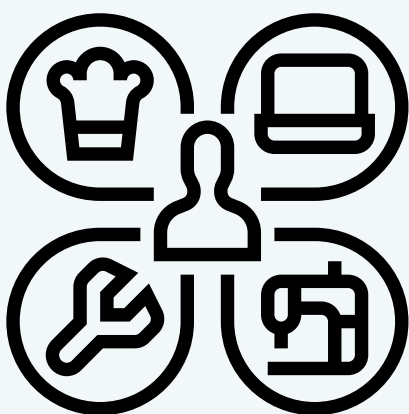
- Work Experience
- Green Certificate
- Registered Apprenticeship Program (RAP)

Pre-Requisites

Workplace Safety, HCS 3000, is a one-credit course that students must complete prior to enrolling in Work Experience and our Registered Apprenticeship Program.

Agricultural Safety, AGR 3000, is a one-credit course that students must complete prior to enrolling in the Green Certificate program.

It is important that students complete pre-requisites promptly, and contact their Student Services Coordinator once they finish. That way, our Student Services team can add your Off Campus Education course to your schedule so you can start submitting the required paperwork.



Off-Campus Education

Work Experience 15-25-35 (Variable Credits)

Students must first complete Workplace Safety (HCS 3000). Students must have a job or volunteer position that meets the requirements of the program. To start the course, students must submit all required forms in Canvas and have an approved site inspection completed at their workplace by a CFL staff member. Every 25 hours of work is worth 1 credit. Students must complete a minimum of 3 credits and a maximum of 10 credits per level. Please note that, although students can earn 10 credits per level, only 15 credits will count towards their 100 credits required for the Alberta high school diploma.

Please contact the Work Experience teacher, Mr. Kanters, if you are unsure if your work placement is eligible for this program.

Green Certificate (5 credits per level up to 15 total credits)

Green Certificate is an agricultural apprenticeship program, which will provide students with a credential that can lead to a career in agribusiness. Students learn on the job, under the direct supervision of experienced farm personnel and under the supervision and administration of Alberta Agriculture Forestry (AF) and Alberta Education. Students must have a trainer and access to a suitable agricultural location. Students register online through GINA to start and receive their training manuals. To receive credits, students must book their testing (TEST X,Y,Z) at a designated testing facility.

Students must first complete Agricultural Safety (AGR 3000). Students must also have an approved site inspection completed at the designated worksite by a CFL staff member.

Specializations available: Beekeeper, Cow Calf Beef, Dairy, Equine, Feedlot, Field Crop, Greenhouse, Irrigated Field Crop, Poultry, Sheep, and Swine.

Off-Campus Education

Registered Apprenticeship Program (RAP) (5 credits per 125 hours to a maximum of 40 credits)

Traditionally, apprenticeships in Alberta began following high school graduation. However, some students identify their career interests at an earlier age and are ready to learn and practice their future trade while still in high school. RAP is an ideal program for these students.

Students must have a paying position in the trades and an employer that is willing to take them on as an apprentice. Students must first complete the pre-requisite, Workplace Safety (HCS 3000), to enroll in the course and also need to have an approved site inspection completed at their workplace by a CFL staff member.

RAP students are both full-time students and registered apprentices, dividing their time between an approved work site and their high school studies. They take regular courses such as English Language Arts, Social Studies, Science and Math in order to earn their Alberta High School Diploma.

After an approved site inspection, students fill out an online application to the Apprenticeship and Industry Training organization. Here, students will create a profile. Once this step is complete, Apprenticeship and Industry Training will send students their Blue Book and Apprenticeship ID Card.

Students must complete and submit all the required paperwork in the Canvas Classroom from the Student Implementation Manual. Once this is done and we have the required forms, we are able to set up a site visit at the student's work and then the student can start to collect their hours. The students must submit a Training Plan, Hours Logbook, Employer Evaluation and Student Evaluation every 125 hours.



Career & Technology Studies (CTS)

Career & Technology Studies (1 Credit Each)

Career and Technology Studies (CTS) are complementary courses, providing important learning opportunities for students to:

- develop skills that can be applied in their daily lives, now and in the future;
- refine career-planning skills;
- develop technology-related skills;
- enhance employability skills;
- apply and reinforce learnings; developed in other subject areas and prepare for transition into adult roles in the family, community, workplace and/or further education.

Each CTS course is worth one-credit, and represents approximately 25 hours of instruction. There are three levels: introductory (1000-level), intermediate (2000-level), or advanced level (3000-level).

Although students can register for multiple CTS courses, which have deadlines paced across the school year. If a course has a pre-requisite, students must complete the pre-requisite course first. Students do not need to take CTS in a sequential order, but must complete pre-requisites first.

E.g. FOD 1010 (Foods Basics) is the pre-requisite for all other foods classes. Although a student may request several foods classes at registration, the student must first access and complete FOD 1010.

Students receive all the course material once they have access to the course, and they work through the course ahead of course deadlines. Students will need to fast-track a course if they are enrolled in a course and its pre-requisite.

Career & Technology Studies (CTS)

Agriculture

AGR1040 - Animal Basics

Students learn to identify and demonstrate the basic steps involved in raising and caring for a domestic animal. Students gain an understanding of general care to ensure animal health.

Required Resources: access to a domestic animal e.g. cat, horse etc.

AGR3000 - Agriculture
Safety

Students recognize and assess the hazards and manage the risks of working in agriculture. Required Resources: access to appropriate agricultural facilities and/or equipment.

This course is the pre-requisite to Green Certificate.

Communications

COM1005 - Visual
Composition

This course in the pre-requisite for all COM courses

Students learn to employ fundamental elements and principles of design for various media and gain a strong foundational multidisciplinary experience in preparation for other Communication Technology courses.



Career & Technology Studies (CTS)

Community Care Services	<p>Required Resources for all courses: Access to children between the ages of 0–5 in any of the following ways: a licensed childcare centre; a licensed preschool; a licensed or approved family day home; a licensed out-of-school care program; or, a school-based pre-Kindergarten program. (A Kindergarten program will not fulfill the needs of the program due to the age of the children.)</p>
CCS3110 - Early Learning & Child Care 1	Students will develop skills to assist in promoting the physical, intellectual and language development in children from birth to age six.
CCS3120 - Early Learning & Child Care 2 Pre-Req: CCS3110	Students will develop skills to assist in promoting the social-emotional and creative development with children from birth to age 6. Students also will examine the development of learning through play.
CCS3130 - Early Learning & Child Care 3 Pre-Req: CCS3120	Students will develop skills to assist in promoting the social-emotional and creative development with children from birth to age 6. Students also will examine the development of learning through play.
CCS3140 - Early Learning & Child Care 4 Pre-Req: CCS3130	Students will examine family dynamics and issues, as well as the cultural diversity of the children and families under their care. Students also will develop skills to support and promote the cultural identity of children.
CCS3150 - Early Learning & Child Care 5 Pre-Req: CCS3140	Students will learn appropriate practices related to routines in a childcare program. Students also will plan for the health, safety and well-being of children in childcare programs.



Career & Technology Studies (CTS)

Computers	Provided Resources: Access to a programming language will be provided.
CSE1010: Computer Science 1	Students explore hardware, software and processes. This includes an introduction to the algorithm as a problem-solving tool, to programming languages in general and to the role of programming as a tool for implementing algorithms.
CSE1110: Structured Programming 1	Students are introduced to a general programming environment in which they write simple structured algorithms and programs that input, process and output data, use some of the more basic operators and data types, and follow a sequential flow of control.
CSE 1120: Structured Programming 2 Pre-Req: CSE 1110	Students work with structured programming constructs by adding the selection and iteration program control flow mechanisms to their programming repertoire. They write structured algorithms and programs that use blocks to introduce an element of modularity into their programming practice.
CSE1240: Robotic Programming 1 Pre-Req: CSE1110 This course must be taken concurrently with ELT 2140	Students use an appropriate Robot Control Language (RCL) to design, develop, implement and debug robotics programs that employ standard structured programming constructs and simple data structures. In the process, they develop a general understanding of robots and the robotics environment. Additional Provided Resource: a school-provided kit for students to build a programmable robot.



Career & Technology Studies (CTS)

Design Studies	
DES1010 - Sketch, Draw, & Model	Students are introduced to observational sketching, drawing and modelling, and to a selection of basic materials and tools and their uses. Students also develop skills that can be applied to the field of design.
DES1020 - The Design Process	Students develop an understanding of design problems through research and select, generate and evaluate possible solutions.
DES1030 - 2 D Design Fundamentals Pre-Req: DES1020	Students develop skills and techniques for 2-D design by using tools, materials and processes common to 2-D design to complete a variety of project activities.
DES1040 - 3 D Design Fundamentals Pre-Req: DES1020	Students develop skills and techniques for 3-D design by using tools, materials and processes common to 3-D design to complete a variety of project activities.
DES1050 - CAD 1	Students develop basic knowledge and skills in computer-aided design (CAD).
Electro-Technologies	
ELT1010 - Electro Assembly 1	Students apply basic fabricating and servicing techniques to construct and test electronic and electromagnetic devices and cables.



Career & Technology Studies (CTS)

Electro-Technologies	
ELT1130 - Robotics 1	Students apply the fundamentals of robotics systems and basic robotics functions.
ELT2140 - Robotics 2 Pre-Req: ELT1130 This course must be taken concurrently with CSE1240	Students demonstrate the fundamental concepts of sensor devices and control systems by building an electronic circuit to control a direct wire or mobile robot. Provided Resource: a school-provided kit for students to build a programmable robot.
Financial Management	
FIN1010 - Personal Financial Information	Students explore concepts that affect the finances of an individual, including a code of conduct, the economic environment, acquiring and using financial resources and the effects of government legislation.
FIN1015 - Accounting Prep	Students are introduced to accounting and terminology unique to financial accounting. They become familiar with financial statements, generally accepted accounting principles (GAAP) and how to prepare for the process of starting up a business.
FIN1020 - Accounting Cycle 1 Pre-Req: FIN1015	Students are introduced to the accounting cycle for a service business. They will analyze and record business transactions up to trial balance for the fiscal period of a business using terminology unique to financial accounting.
FIN1030 - Accounting Cycle 2 Pre-Req: FIN1015 & FIN1020	Students complete the accounting cycle for a service business, preparing financial statements and closing accounts. They also will explore other factors of a business, including budgets.

Career & Technology Studies (CTS)

Fashion Studies	<p>Required Resources: student must have access to a sewing machine and related materials (i.e. fabric, thread, buttons and zippers)</p>
<p>FAS1030 - Sewing Fundamentals</p>	<p>Students learn how to safely use and care for sewing and pressing equipment, and apply these skills during the assembly of a final project.</p>
Foods	<p>* FOD1010 is the pre-requisite for ALL Foods modules Required Resources: all cooking ingredients, kitchen access, and tools for cooking/baking.</p>
<p>FOD1010 - Food Basics</p>	<p>Students learn safe and sanitary food handling procedures, equipment care, comprehension of recipes and the importance of efficient work habits.</p>
<p>FOD1020 - Contemporary Baking* Pre-Req: FOD1010</p>	<p>Students develop and demonstrate an understanding of traditional and contemporary Baking focusing on basic measuring techniques, preparation methods, role of ingredients and the proper use of equipment for baked goods.</p>
<p>FOD1030 - Snacks & Appetizers* Pre-Req: FOD1010</p>	<p>Students apply the importance of snacks and appetizers related to lifestyle, by making nutritious, as well as delicious, snacks and appetizers.</p>
<p>FOD1040 - Meal Planning 1* Pre-Req: FOD1010</p>	<p>Students develop an understanding of planning, preparation and evaluation of balanced healthy meals.</p>
<p>FOD1060 - Canadian Heritage Foods* Pre-Req: FOD1010</p>	<p>Students become aware of how food in Canada today reflects the country's history and origins by examining food patterns and customs, and by analyzing and preparing ethnic foods.</p>

Career & Technology Studies (CTS)

Foods	* FOD1010 is the pre-requisite for ALL Foods modules Required Resources: all cooking ingredients, kitchen access, and tools for cooking/baking.
FOD2040 - Cake and Pastry* Pre-Req: FOD1010	Students expand their knowledge and skills in the production of a variety of cake and pastry products.
FOD3020 - Nutrition & Digestion* Pre-Req: FOD1010	Students learn about nutrition and how the body processes food by appraising current nutritional theories/issues and dietary needs.
FOD3030 - Creative Baking* Pre-Req: FOD1010	Students learn about specialty cakes and pastry products by selecting and creating specialty cakes, pastries, desserts and a major baked project.
FOD3060 - Food Presentation* Pre-Req: FOD1010	Students develop creativity and flair while learning the techniques of tempting and artistic food presentation.
FOD3100 - Entertaining with Food* Pre-Req: FOD1010	Students plan and prepare food for an event and develop organizational skills that may be used in the hospitality industry, at home or in entrepreneurial endeavors.
FOD3160 - Regional Cuisine* Pre-Req: FOD1010	Students explore, in depth, the cuisine of a region in order to appreciate the richness of its history and culture. They discover its foods, learn about food customs, experience traditional cooking methods and adapt local produce to create regional recipes.



Career & Technology Studies (CTS)

Health Care Services	
HSS 1010- Health Services Foundations	<p>Students examine fundamental attitudes, knowledge, and skills to prepare for further study in career pathways in health, recreation, and community services. Concepts related to the determinants of health, the dimensions of wellness, basic principles of anatomy , physiology and disease, and basic safety and reporting protocols for providing care to individuals in health, recreation, volunteer and community support settings are reviewed.</p>
HCS2020 - First Aid/CPR with AED	<p>Students study and demonstrate first-aid skills and procedures, including cardiopulmonary resuscitation (CPR) and automatic external defibrillator (AED), for dealing with emergency situations. Students recommend practices for a safe environment and demonstrate skills and procedures for dealing with common emergency situations. Students examine safety strategies to prevent infection from blood-borne pathogens in healthcare and recreational settings.</p> <p>Provided Resources: students will be enrolled in an ‘Adult-Child-Infant CPR/AED First Aid’ course if they do not already possess relevant certification</p>



Career & Technology Studies (CTS)

Health Care Services	
<p>HCS3040 - Child Care First Aid</p> <p>Recommended to take HCS2020 concurrently with HCS3040 if you have not already taken it.</p>	<p>Students study and demonstrate first-aid skills and procedures, including CPR and automated defibrillator (AED), for dealing with emergency situations with emphasis on children and infants. Students identify a child safe environment and recognize and demonstrate skills and procedures for dealing with child and infant emergency situations and medical conditions.</p> <p>Required Resources: Access to instruction from an individual with a recognized first aid and first aid in child care/CPR instructor's certificate. This is mandatory. Students are not required to have First Aid and CPR for children certification, but must have proof that they have received instruction from someone with an instructor's certificate in child First Aid and CPR.</p> <p>Provided Resources: students will be enrolled in a First Aid with CPR/AED First Aid course if they do not already possess relevant certification.</p>
Workplace Safety	
<p>HCS3010 - Workplace Safety Practices</p> <p>Pre-Req: HCS3000</p>	<p>Students explore workplace safety principles and practices, and apply these principles and practices to a variety of contexts.</p>
<p>HCS3000 - Workplace Safety Systems</p>	<p>Students gain the attitudes, knowledge and skills related to workplace health and safety and examine relevant legislation required in the workplace.</p> <p>This course is the pre-requisite for Work Experience and RAP.</p>

Career & Technology Studies (CTS)

Information Processing	
INF 1030 - Word Processing 1	Students are introduced to the proper use of word processing software including documents creation, editing and printing of properly formatted documents.
INF1060 - Spreadsheet 1	Students develop skills in the proper use of spreadsheet software through general data manipulation and personal recordkeeping.
INF2020 - Keyboarding	Students enhance their occupational level keyboarding competence of all keystroke functions, using unedited, edited and straight copy material.
INF2050 - Word Processing 2	Students develop their skills in the proper use of word processing software, including document creation, editing and printing of properly formatted documents.
INF2080 - Spreadsheet 2	Students develop skills in the proper use of spreadsheet software through advanced data manipulation and preparation of appropriate reports and printouts in text and graphic format.
INF3060 - Word Processing 3 Pre-Req: INF2050	Students master their skills in the proper use of word processing software, including document creation, editing and printing of properly formatted documents.

Career & Technology Studies (CTS)

Legal Studies	
LGS1010 - Private Law	Students explore workplace and consumer law with a focus on basic rights and responsibilities at a place of work and the legal aspects of buying, selling and renting goods and services.
LGS3010 - Property Law	Students identify laws relating to real, personal and intellectual properties and investigate the processes of buying and selling real property and the legal implications associated with Internet transactions.
LGS3080 - Criminal Law	Students examine the criminal justice system, including the criminal process and the roles and responsibilities of the participants. Students also explore challenging issues and law-related careers.
LGS3040 - Negligence	Students explore the legal meaning of negligence and legal actions relating to negligence.
LGS3070 - Landmark Decisions	Students analyze in detail landmark decisions and their influence on society.



Career & Technology Studies (CTS)

Wildlife	*Students must register for and complete WLD1070, WLD1075, WLD1080 concurrently*
WLD1010 - Introduction to Wildlife	Students develop the attitudes, skills and knowledge related to wildlife and ecosystems, and an understanding for the need to manage wildlife.
WLD1020 - Wildlife Diversity	Students investigate the diversity of Canadian wildlife in terms of structure, behavior and habitat, and compare Alberta wildlife with wildlife in other parts of the world.
WLD1070 - Hunting & Game Management Theory *This course must be concurrently completed with WLD 1075 & WLD 1080*	Students explain the role of regulated hunting in game management, identify Alberta's game animals, and develop and demonstrate the attitudes, skills and knowledge necessary for safe and comfortable experiences in the outdoors with bows, arrows, crossbows and firearms. Provided resources: Access to complete the Hunter Education Certificate.
WLD1075 – Bow Hunting Education *This course must be concurrently completed with WLD 1070 & WLD 1080*	Students explain the role of regulated bow hunting in game management, identify Alberta's game animals, develop, and demonstrate the attitudes, skills and knowledge for safe and comfortable experiences in the outdoors. Provided resources: Access to complete the Hunter Education Certificate.
WLD1080 - Angling & Fish Management Theory *This course must be concurrently completed with WLD 1070 & WLD 1075*	Students explain the role of recreational fishing in the management and conservation of fish resources, and develop the attitudes; skills and knowledge required for responsible fishing practices and related outdoor activities Provided resources: Access to complete the Hunter Education Certificate.

Career & Technology Studies (CTS)

Wildlife	*Students must register for and complete WLD1070, WLD1075, WLD1080 concurrently*
WLD1090 - Boating Safety	Students develop the attitudes, skills and knowledge to evaluate their capabilities and limits, to prepare themselves adequately before heading out, and to be responsible on the water.



GRADES 10-12 POST-SECONDARY PLANNING GOALS

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- Be open to trying a variety of courses and activities to discover your strengths and what brings you joy.
- Spend time exploring myBlueprint and/or ALIS.
- Consider tracking volunteering, extra-curriculars, and other key activities to maintain this dated record across high school.
- Set up your myPass account.

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- Consider volunteering, work experience, or job shadowing to further explore emerging interests.
- If pursuing post-secondary, work on narrowing down your top post-secondary programs and school choices; strive for a minimum of two each.
- Investigate career pathway and post-secondary requirements.
- If pursuing a trade, consider off-campus education opportunities.

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- Set aside ample time to apply for post-secondary schools, and apply early! Most applications open in September or early October, and some non-competitive programs may be first-qualified, first-accepted.
- Pay attention to application, scholarship, transcript, residence, acceptance, and course enrollment deadlines/processes for each school you apply to. Every school is different.
- Check your student account and email communications frequently to ensure you do not miss any important admissions' communications.
- Make a plan to pay for schooling, including scholarship applications and student loans.*

*Remember to apply for the [Alexander Rutherford Scholarship](#) when eligible.

For additional checklists, [click here](#).



NEED MORE INFORMATION?

The Centre for
LEARNING
@HOME

CANVAS RESOURCES

All students in Grades 10-12 will receive access to the High School Student Services icon, which can be accessed from the Canvas dashboard.

- Under modules, you can find resources such as:
- current high school course offerings
- scholarship information
- post-secondary and career planning events and tools
- graduation communications and registration
- and MORE!



Ms. Amanda Kerton

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Direct: 403-995-7507

akerton@redeemer.ab.ca

Please note that initial program planning questions will be answered during your course selection appointment.

I look forward to meeting with you!

"Be who you are and be that well, to give honor to the Master Craftsman whose handiwork you are."

- *St. Francis de Sales*

