FRANK MADDOCK HIGH SCHOOL

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HIGH SCHOOL
COURSE SELECTION GUIDE
2023-24

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PROGRAM PLANNING INFORMATION

Accelerating Courses - In some situations students may choose to accelerate a core course. This is not the recommended route for many reasons. Students who wish to accelerate must have an 85% or higher in their pre-requisite course by mid-November in order to qualify. Prior to approval students will be required to fill out the Course Acceleration Request Form and have a meeting with the Administration. Course accelerations are not guaranteed as priority in classes goes to students requiring the course for Graduation. For more information, see the FMHS Student Handbook.

Course Selection – Students in Grade 10 and 11 MUST carry full timetables and are NOT permitted to have "spare" blocks in their timetables, except for very exceptional circumstances approved by the Principal. Each Grade 10 and 11 student will enroll in a minimum of eight courses. Grade 12 students are allowed to have one "spare" block in their Grade 12 year as long as they are on track to Graduation. Grade 12 students with a full academic load (6 core courses) may be eligible for 2 "spare" blocks.

Course Changes – Course changes can be done within 2 weeks of the start of the Semester. Changing to a new class after 2 weeks will not be allowed unless exceptional circumstances are presented. Not all course requests can be accommodated. Changes made to be with friends or for teacher selection will not be accommodated.

Self Directed Learning Course – Self Directed courses are a flexible option that is available in our school for students who cannot fit required classes into their timetable. This option is not for every student as it requires a high level of self discipline and work ethic to complete a course at your own pace.

Repeating Courses – students who have failed required courses will be rescheduled into those courses to meet graduation requirements.

Post-Secondary Admissions - When selecting courses, students should research post-secondary requirements to ensure they are making suitable course selections. Current post-secondary calendars are available online. It is the student's responsibility to be aware of any post-secondary requirements and plan accordingly. If a student is unsure of the requirements, they should book an appointment with one of our Academic Counsellors.

Class Size Limitations – When space in classes is limited, priority will be given to students needing the course to meet graduation requirements. Students wishing to upgrade previously attempted courses may be admitted depending on availability of space.

It is very important that students and parents understand that course offerings at FMHS are determined by the selections made in this programming process. Changes to your choices may not be possible once spring course selection is completed. Some courses may not run due to low enrollment or may only have spots available for those who chose the course in the selection process. Please be very careful to make choices that fit with your future educational and/or vocational plans. Our counselors are available to answer your questions or to direct you to resources. For additional information, please see the FMHS Student Handbook.

MY HIGH SCHOOL PLANNING

MyPass Alberta

myPass.ca Alberta Education recently changed the way high school progress and Diploma exam results are shared with students and families. In order to track a student's progress through high school, it is necessary to sign up at the Alberta Education "MyPass" website, which can be found at mypass.alberta.ca. Students in Grade 10 should sign up for an account and begin tracking their progress towards a High School Diploma or Certificate of Achievement. A MyPass account can be quickly set up by visiting Student Services.

Planning Checklist for students:

- Sign up at mypass.alberta.ca or see Mrs. Hiebert at the front office to get help in registering
- Make sure your plan meets Alberta High School Diploma requirements and fulfills your personal goals
- Research Post-Secondary or Apprenticeship programs you are interested in and ensure you are enrolled in the courses required for entrance or on track to the courses required.
- Ensure you have the prerequisite courses for each of your course selections
- Be realistic in your planning
- Talk about your choices with your parents. If you have any questions, seek out the advice of a counsellor or administrator to help you with your planning.

Credits

To receive credits in a course, you must achieve a mark of at least 50%. Credits can only be earned once in any course. In most courses students will earn 3 or 5 credits once they achieve the 50%. CTS courses are broken into 1 credits modules and, therefore, students can earn between 1 and 5+ credits in a 5 credit block depending on their work ethic.

Typically a 5 credit block is for a whole semester and a 3 credit block is for half a semester. In some option courses students can also earn 4 credits depending on their work ethic and attendance.

Course Numbering

Courses are arranged in sequences and assigned course numbers indicating both grade level and level of academic challenge. If there is more than one course sequence offered within a subject area, it will be indicated by the last digit of the course number (for example, English 10-1, 20-1 and 30-1 or English 10-2, 20-2 and 30-2). Grade 10 courses are indicated by course numbers that start with the number 10 or 15 (for example Mathematics 10-1 or 10C) Grade 11 courses start with the number 20 or 25. Grade 12 courses start with the number 30 or 35

Prerequisites

You must successfully earn a grade of at least 50% in a course to take the next course in a sequence (for example Social Studies 10-1 to 20-1 to 30-1). If you don't meet the 50% requirement in certain academic courses (English 10-1 or 20-1, Social Studies 10-1 or 20-1, Math 10C or 10-3, Science 10) you may elect to repeat the course.

With special permission of the principal and a minimum mark above 40%, you may continue to the next higher level in an alternate course sequence (for example, from Social Studies 10-1 to Social Studies 20-2). This will only occur at the recommendation of the teacher and if you have proven to have the skills and knowledge to be successful in the lower stream at the higher level. If you successfully complete the next level course, you will be granted retroactive credits in the prerequisite course. It is decided on a case by case basis

GRADUATION REQUIREMENTS

ALBERTA HIGH SCHOOL DIPLOMA: GRADUATION REQUIREMENTS (ENGLISH)

The requirements indicated in this chart are the minimum requirements for a student to attain an Alberta High School Diploma. The requirements for entry into Post-Secondary Institutions and workplaces may require additional and/or specific courses.

100 CREDITS
including the following:

ENGLISH LANGUAGE ARTS - 30 LEVEL
(English Language Arts 30-1 or 30-2)

SOCIAL STUDIES - 30 LEVEL
(Social Studies 30-1 or 30-2)

MATHEMATICS - 20 LEVEL
(Mathematics 20-1, Mathematics 20-2, Mathematics 20-3

SCIENCE - 20 LEVEL
(Science 20, Science 24, Biology 20, Chemistry 20, Physics 20)

PHYSICAL EDUCATION 10 (3 CREDITS)

CAREER AND LIFE MANAGEMENT (3 CREDITS)

10 CREDITS IN ANY COMBINATION FROM:

- Career & Technology Studies (CTS) courses
- Fine Arts courses
- Second Language courses
- Physical Education 20 and/or 30
- Knowledge and Employability courses
- Registered Apprenticeship Program courses
- Locally developed CTS, fine arts, second languages, or Knowledge & Employability occupational courses

10 CREDITS IN ANY 30-LEVEL COURSE
(IN ADDITION TO A 30-LEVEL ENGLISH LANGUAGE ARTS AND A 30-LEVEL SOCIAL STUDIES COURSE AS SPECIFIED ABOVE)

These courses may include:

- 30 - level Mathematics, Science, PE, Fine Arts, Second Languages courses
- 30 - level Locally Developed Course
- Advanced level (3000 series) in Career & Technology Studies courses
- 30 - level Work Experience
- 30 - level Knowledge & Employability courses
- 30 - level Registered Apprenticeship Program courses
- 30 - level Green Certificate Specialization courses
- Special Projects 30

CERTIFICATE OF HIGH SCHOOL ACHIEVEMENT REQUIREMENTS (ENGLISH)		
The requirements indicated in this chart are the minimum requirements for a student to attain a Certificate of High School Achievement. The requirements for entry into post-secondary institutions and workplaces may require additional and/or specific courses.		
80 CREDITS Including the following:		
ENGLISH LANGUAGE ARTS 20-2 OR 30-4		
MATHEMATICS 10-3 OR 20-4		
SCIENCE 14 OR 20-4		
SOCIAL STUDIES 10-2 OR 20-4		
PHYSICAL EDUCATION 10 (3 CREDITS)		
CAREER AND LIFE MANAGEMENT (3 CREDITS)		
5 CREDITS IN • 30 - level Knowledge and Employability occupational course, or • Advanced level (3000 series) in Career and Technology Studies • 30 - level locally developed course with an occupational focus AND 5 CREDITS IN • 30 - level Knowledge and Employability Workplace Practicum course, or • 30 - level Work Experience course, or • 30 - level Green Certificate course, or • Special Projects 30	OR	5 CREDITS IN • 30 - level Registered Apprenticeship Program (RAP) course.

Course Planning Worksheet

Use this form as you read through the course descriptions and select your possible courses. Blank spaces are for adding your complementary courses. List your initial choices. Make a plan; revisit the plan; and change your plan as needed throughout your high school career.

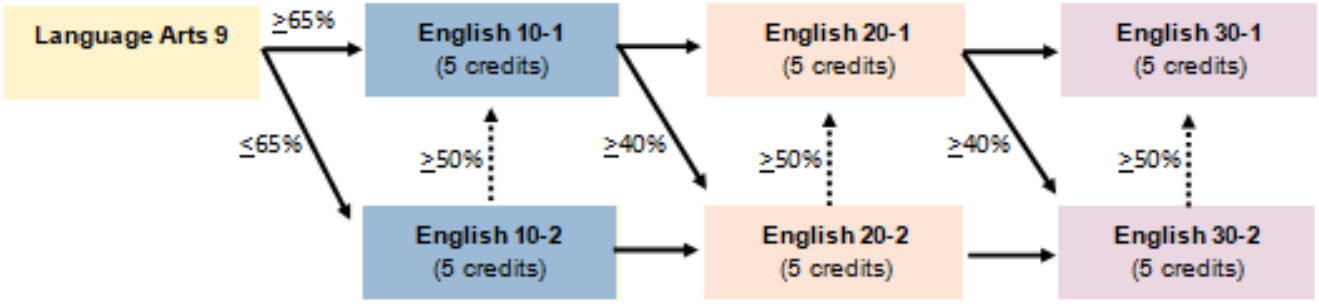
Grade 10 / Year 1				Grade 11 / Year 2				Grade 12 / Year 3				Possible Year 4			
Course Name	**Course No.**	**Mark**	**Credits**	**Course Name**	**Course No.**	**Mark**	**Credits**	**Course Name**	**Course No.**	**Mark**	**Credits**	**Course Name**	**Course No.**	**Mark**	**Credits**
English	10-		5	English	20-			English	30-						
Social	10-		5	Social	20-			Social	30-						
Math			5	Math											
Science			5	Science											
Phys. Ed.	10		3, 4 or 5												
Year 1 Credit Total Recommended 40 credits minimum in a 3 year plan.				**Year 2 Credit Total** Recommended 38-40 credits minimum in a 3 year plan.				**Year 3 Credit Total** Recommended 30-35 credits minimum in a 3 year plan.				**Year 4 Credit Total**			

ALBERTA HIGH SCHOOL DIPLOMA MINIMUM REQUIREMENTS	
☐ English 30-1 or 30-2	☐ PE 10
☐ Social 30-1 or 30-2	☐ CALM
☐ Math 20-1, 20-2, or 20-3	☐ **100 credits** or more
☐ Science 20 or 24 or Biology 20, or Chemistry 20, or Physics 20, **OR** ☐ Science 14 AND Science 24	
☐ **10 credits in any combination from**: CTS, Fine Arts, Languages, PE 20 or 30, K & E Courses, RAP Courses, or Locally Developed and Authorized Courses from any of these categories, **AND**	
☐ 10 credits in any **30-level courses** (in addition to English 30-1 or 30-2 and Social 30-1 or 30-2)	

ALBERTA CERTIFICATE OF HIGH SCHOOL ACHIEVEMENT MINIMUM REQUIREMENTS	
☐ English 20-2 or K&E English 30-4	☐ PE 10
☐ Social 10-2 or K&E Social 20-4	☐ CALM
☐ Math 10-3 or K&E Math 20-4	☐ **80 credits** or more
☐ Science 14 or K&E Science 20-4	
☐ **5 credits in 30-level courses including:** K&E occupational OR CTS courses, or Locally Developed and Authorized Courses with an occupational focus, **AND**	
☐ **5 credits in 30-level courses including:** K&E Workplace Practicum, OR Work Experience, Green Certificate Specialization OR Special Projects	

CORE COURSES

ENGLISH LANGUAGE ARTS



Language Arts 9

Language Arts 9 is a required course for all Grade 9 students. It is offered as a year-round course with one semester full time and the other semester on alternating days.
Please note: A mark of 65% or greater in LA 9 is recommended for continuing into English 10-1.

English 10-1 - 20-1 - 30-1	English 10-2 - 20-2 - 30-2
These courses are for students who are strong in Language Arts and wish to pursue academic written work; critical and analytical responses to literature; who intend to enroll in Post-Secondary following Graduation. Successful completion of English 30-1 fulfills a requirement for an Alberta High School Diploma.	The focus of these courses is on practical written tasks and study of more familiar, entertaining literature. These courses are for students who wish to enter the workforce from high school and are a prerequisite for some diploma programs. Successful completion of English 30-1 fulfills a requirement for an Alberta High School Diploma.

Post-secondary institutions set their own high school english requirements for entrance into different programs. If you have an interest, you should research its current requirements. If you have questions, see your current teacher or Student Services, and discuss your selections with your parents or guardians.

English 9

In the last year of junior high English Language Arts, Grade 9 students examine ideas, experiences and information from points of view that differ from their own. Your teen will discuss how different people take away different meanings from the same material, understanding that each individual's knowledge and experience affect their way of interpreting information. Using different sources of information, your teen will continue to develop their own opinions and impressions on various topics.

English 10-1

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 10-2

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 20-1

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 20-2

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.

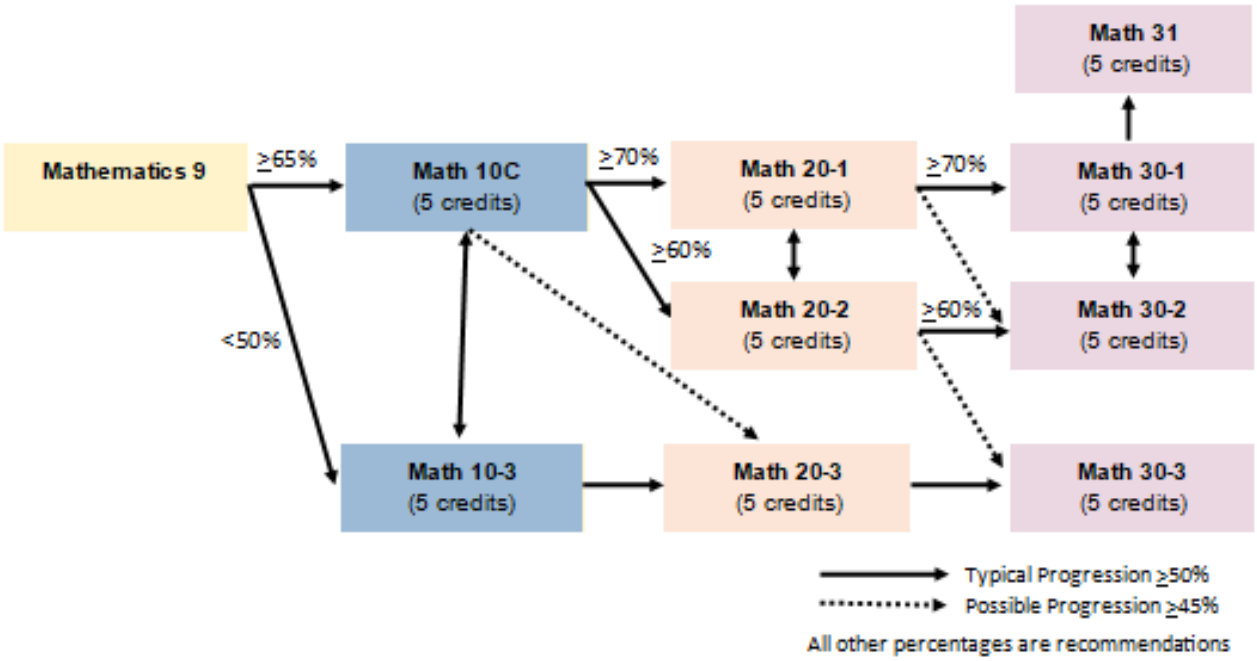
English 30-1

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 30-2

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.

MATHEMATICS



Mathematics 9
Mathematics 9 is a required course for all Grade 9 students. It is offered as a year-round course with one semester full time and the other semester on alternating days. **Please note**: A mark of 65% or greater in Math 9 is recommended for continuing into Math 10C.
Mathematics -1
Mathematics -1 is for students who plan to enter Post-Secondary programs such as Engineering, Mathematics, Sciences, some Business Studies, or other programs requiring advanced Math skills. The sequence is a co-requisite for Mathematics 31 and may be required for post-secondary calculus courses. **Please note**: To continue within the dash-one stream a mark of 70% or greater is recommended.
Mathematics -2
Mathematics -2 will fulfill most students' needs for Post-Secondary requirements. Mathematics-2 is designed with a great deal of flexibility, so that a student can switch sequences in Grade 11 or 12 if his or her interests change. **Please note**: to continue within the -2 stream a mark of 60% or greater is recommended.
Mathematics -3
Mathematics -3 is for students who want to apprentice to a trade or enter the workforce directly after high school. It is designed to meet the entrance requirements for apprentices in most trades programs, specifically levels one to three.

Post-secondary institutions set their own high school math requirements for entrance into different programs. If you have an interest, you should research its current requirements. If you have questions, see your current teacher or Student Services, and discuss your selections with your parents or guardians.

Mathematics 9

Grade 9 Math students understand powers with integral bases and whole number exponents; compare and order fractions and decimals; add, subtract, multiply and divide positive and negative fractions and decimals; determine square roots of positive rational numbers that are perfect squares; estimate square roots of positive numbers that are non-perfect squares; interpolate or extrapolate from the graph of a linear relation to solve problems; add and subtract polynomials; multiply and divide a polynomial by a monomial; solve problems involving surface area of composite 3-D objects; understand similarity of polygons; and understand line and rotation symmetry; understand data collection techniques and biases.

Mathematics 10C

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

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 20-1

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 radicals and rational expressions. Mathematics 20-1 students also analyze the characteristics of absolute value functions and quadratic functions, solve quadratic equations and systems of equations in various ways, and analyze the relationship between a function and its reciprocal.
Recommended: A grade of 70% or higher is recommended in Math 10C to go into Math 20-1.

Mathematics 20-2

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

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 30-1

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.

Mathematics 30-2

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.

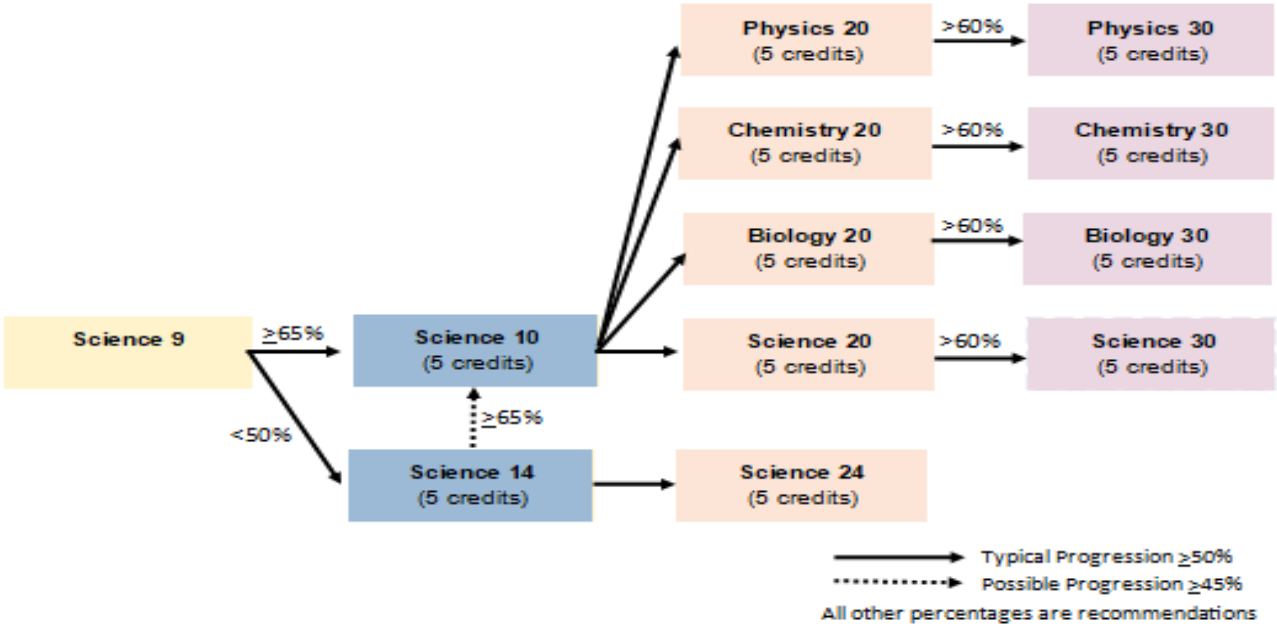
Mathematics 30-3

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.

Mathematics 31

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.

SCIENCE



Science 9

Science 9 is a required course for all Grade 9 students. It is a semester course, which means students will only complete the course in 1 semester.
Please note: A mark of 65% or greater in Sci 9 is recommended for continuing into Science 10.

Science 10

Science 10 is a prerequisite for Biology 20, Chemistry 20, Physics 20, and Science 20.

Science 14 → 24

Science 14 → 24 provides the student with a general background to the information given in the other streams. These courses provide the minimum requirements for an Alberta High School Diploma.

Biology 20 → 30	Chemistry 20 → 30	Physics 20 → 30	Science 20 → 30
The Biology 20 program studies 4 major areas: 1)Energy & Matter Exchange in the Biosphere; 2) Ecosystems & Population Change; 3) Photosynthesis & Cellular Respiration; 4) Human Systems. The Biology 30 program looks at 4 major topics: 1) Systems regulating change in the human organism; 2) Reproduction & development; 3) Cells, mitosis, & meosi, chromosomes & DNA; 4) Changes in populations & communities.	Matter & chemical change are the themes common to all units in Chemistry 20. The 4 units of study are: 1)Diversity of matter & chemical bonding; 2) Forms of Matter & Chemical bonding; 3) Matter as Solution, Acids, & Bases; 4) Quantitative Relationship in Chemical Changes Chem 30 consists of 3 units of study: 1) Thermochemical Changes; 2) Electrochemical change; 3) Chemical Changes of Organic Compounds; 4) Chemical Equilibrium Focusing on Acid-Base systems.	Energy is a common theme in Physics 20. The 4 units of study are: 1) Kinematics; 2) Dynamics; 3) Circular Motion, work and energy; 4) Oscillatory Motion & Mechanical Waves. The themes of Physics 30 are energy, change, systems, matter, and diversity. The units of study are: 1) Momentum & Impulse; 2) Forces & Fields; 3) Electromagnetic Radiation; 4) Atomic Physics	This program's goal is to provide students with an overview of all the sciences so they have a general knowledge of the impacts of science on daily lives, environmental issues and a basic understanding of the principles behind modern research. Science 30 is recognized as an academic science for post-secondary entrance in most institutions.

Science 9

Students will begin to unravel the significance of DNA in genetics—including its role in determining traits like hair colour—and they'll identify the scientific and technological advancements that led to human exploration of the moon and beyond! They will be energized as they problem-solve and experiment with electricity and evaluate the benefits and impacts of energy use. Students will continue to develop as a scientist as they conduct and analyze chemical reactions and apply their understanding of chemistry to the world around them.

Science 10

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

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.

Biology 20

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

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

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 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

Why do we need vaccines and antibiotics? Science 24 students investigate common chemical reactions and examine energy conversions in biological, chemical, physical 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 real-life situations.

Biology 30

Why is there so much diversity? Biology 30 students conduct lab work and 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.

Chemistry 30

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.

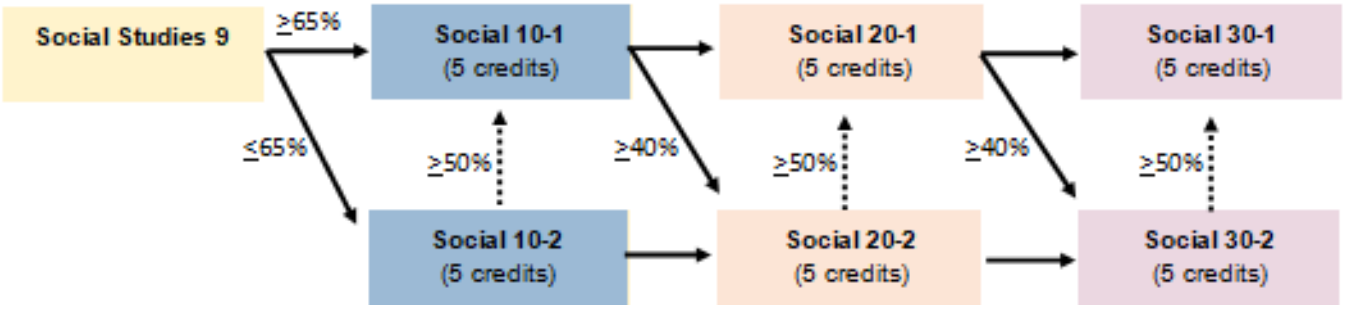
Physics 30

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.

Science 30

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.

SOCIAL STUDIES



Social Studies 9
Social Studies 9 is a required course for all Grade 9 students. It is a semester course, which means students will only complete the course in 1 semester. **Please note**: A mark of 65% or greater in SS 9 is recommended for continuing into Social 10-1.
Level
Social Studies 10-1: Exploring Globalization Social Studies 10-2: Living in a Globalized World Social Studies 20-1: Exploring Nationalism Social Studies 20-2: Understanding of Nationalism Social Studies 30-1: Perspectives on Ideology Social Studies 30-2: Understanding of Ideology **Social Studies 30-1 may be used as a requirement for students who intend to enroll in Post-Secondary following Graduation. Students should research the requirements for potential post-secondary programs to ensure the selection meets the demands of their chosen institution.** **Successful completion of Social Studies 30-1 or 30-2 fulfills a requirement for an Alberta High School Diploma.**

Post-secondary institutions set their own high school social requirements for entrance into different programs. If you have an interest, you should research its current requirements. If you have questions, see your current teacher or Student Services, and discuss your selections with your parents or guardians.

Social Studies 9

Students will discover the important influences that government and economics have on our lives. They'll focus on the rights, roles and responsibilities of citizens in decision-making processes and in the Canadian justice system. Students will also explore issues related to immigration and consider the impact of economic decisions on the quality of life experienced in Canada and in the United States.

Social Studies 10-1

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

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 20-1

What is nationalism and how does it affect us? Social Studies 20-1 students look at the 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

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 30-1

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

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.

CTS

COURSES

COMMUNICATION TECHNOLOGY (COMM TECH)

Comm Tech 10

Students will learn elements of design and typography, visual presentation, and the production of visual images for different aspects of media. Following curriculum, students will get basic instruction on pre-production, production and post-production for video assignments. Students will have hands-on experience with industry standard software and dslr video equipment. Comm Tech 10 is an opportunity to learn how to take amazing photographs, produce cool images in Adobe Photoshop and begin to explore video and sound within the students film shorts.

Comm Tech 20

In Comm Tech 20, students have the opportunity to continue exploring different mediums such as photography, movie making, video editing, and graphic design. Students build on the foundations presented to them from Comm Tech 10.

Comm Tech 30

In Comm Tech 30, students have the opportunity to explore the advanced aspects of their chosen mediums such as photography, movie making, video editing, and graphic design. Students build on their prior knowledge from Comm Tech 10/20 and continue to develop their skills and interests within the world of Digital Media.

CONSTRUCTION

*Construction 9 is NOT a prerequisite for Construction 10.

**10 level courses are typically 5 credits, students can earn more or less credits based on module completion

***20/30 level courses are typically 5 credits, students can earn more or less credits based on module completion.

Students in construction and design courses will learn skills and knowledge related to the construction trades. They will become skilled in the use of tools and materials while focusing on the integration of theory with practical applications.

Construction 10

Construction 10 provides students with an overview of 3 main sections of building construction. The course is broken up into 3 main parts; hand tools, building construction, and cabinet making. This allows students to explore these 3 areas and further specialize in subsequent courses.

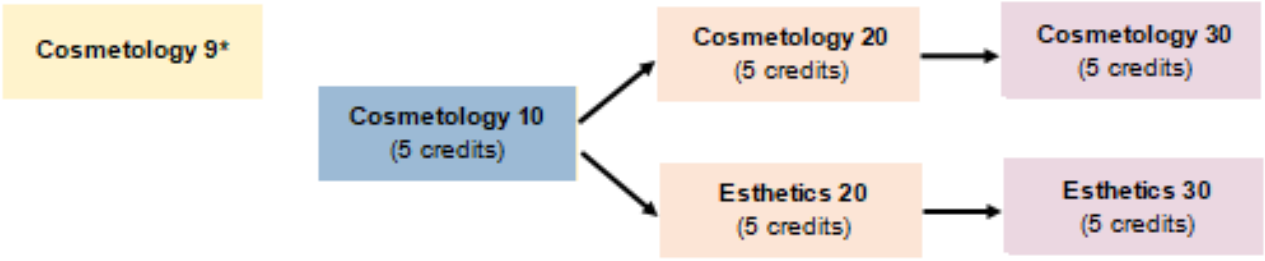
Construction 20

Construction 20 further allows students to explore in more detail, aspects of both building construction and cabinet making by introducing advanced skills to students while allowing specialization of demonstrated strengths.

Construction 30

Construction 30 continues to advance skill development and introduces career options and discussions to those students that anticipate post secondary options in any of the available trades.

COSMETOLOGY



*Cosmetology 9 is NOT a prerequisite for Cosmetology 10.

**10 level courses are typically 5 credits, students can earn more or less credits based on module completion

***20/30 level courses are typically 5 credits, students can earn more or less credits based on module completion.

These courses offer full technical training in all aspects of the cosmetology trade, including hairstyling, make-up, nail tech, skin care and manicuring. Students training in this area are well-prepared for employment in the industry after they leave high school. Cosmetology 9 is beneficial but not necessary to take Cosmetology 10. If all modules designated as apprenticeship courses are completed prior to leaving high school, students can be given credit towards the theory component of the Hairstylist Apprenticeship.

Cosmetology 10

The introductory level of Cosmetology gives students the chance to explore the hairstyling components of Cosmetology. They learn basic hairstyling, hair care, hair coloring, roping, knotting and braiding techniques that meet industry standards, using appropriate materials and equipment. Students learn to respect the environmental, health and safety laws, and explore career opportunities.

Cosmetology/ Esthetics 20 (double block)

This group of modules is taught in a double block time period. In this intermediate level of Cosmetology, students continue to develop the skills they learned in Cosmetology 10, and can choose their own courses from the ten credits of hairstyling and ten credits of esthetics being offered. Students can focus on one of the areas, or have a more general experience and take some courses from both areas.

The hairstyling credits include:

- Haircutting
- Colouring
- Chemical texturizing
- Advanced styling
- Hair care
- Anatomy
- Hair Wrapping

The esthetics credits include:

- Skin Care
- Nail art
- Pedicuring
- Make up
- Manicuring & pedicuring
- Hair removal
- Facial & body adornment

Cosmetology/Esthetics 20 (single block)

This group of modules is taught in a single block time period. In this intermediate level of Cosmetology, students continue to develop the skills they learned in Cosmetology 10, and can choose their own courses from the ten credits of hairstyling and ten credits of esthetics being offered. Students can focus on one of the areas, or have a more general experience and take some courses from both areas.

The hairstyling credits include:

- Haircutting
- Advanced styling+
- Hair care
- Anatomy
- Hair Wrapping

The esthetics credits include:

- Skin Care
- Nail art
- Pedicuring
- Make up
- Manicuring & pedicuring
- Hair removal
- Facial & body adornment

Cosmetology/ Esthetics 30 (single or double block)

This group of modules is taught in a single or a double block time period depending on . In this advanced level of Cosmetology/ Esthetics, students will choose their courses from the available senior hairstyling and esthetics credits. These courses focus on more in-depth techniques and client services to prepare students for a career in a Cosmetology-related field.

The courses that are available at this level include:

- Salon Operations
- Advanced Hair Cutting/ Texturizing techniques
- Advanced Colouring
- Chemical texturizing
- Men's haircutting
- Straight Blade Shaves
- Body treatments
- Hair colour removal
- Make up
- Manicuring
- Facials
- More in-depth courses that build on basic knowledge from Cosmetology/ Esthetics 10 & 20

FABRICATION

*Fabrication 9 is NOT a prerequisite for Fabrication 10.

**10 level courses are typically 5 credits, students can earn more or less credits based on module completion

***20/30 level courses are typically 5 credits, students can earn more or less credits based on module completion.

Students develop knowledge and skills in the use of basic hand tools and materials used in fabrication processes, and safely transform common metals into useful products.

Fabrication 10

This is an entry level 5 credit course that focuses primarily on tool safety and recognition. By the end of the semester students should be able to safely, cut, tack, and weld the most basic of joints and materials. As an introductory course, a strong emphasis will be placed upon developing the skills and attitudes necessary for future success.

Fabrication 20

This is an intermediate level 5 credit course that builds on strengths and knowledge gained in Fabrication 10. By the end of the semester students should be able to safely weld materials in multiple positions including flat and horizontal.

Fabrication 30

This is an advanced level 5 credit course that builds on the strengths and knowledge gained in Fabrication 10-20. Students will gain experience in the various processes used in the cutting and joining of metals; as well as developing habits in safe workplace procedures. Upon successful completion, students who are intrigued by a career in the trades will hopefully pursue a welding career by exploring a Register Apprentice Program.

FOODS

*Foods 9 is NOT a prerequisite for Foods 10.

**10 level courses are typically 5 credits, students can earn more or less credits based on module completion

***20/30 level courses are typically 5 credits, students can earn more or less credits based on module completion.

Students in the Foods program gain valuable skills and expertise in the art and science of cooking. Courses include meal preparation and planning, culinary skills, as well as safety and sanitation training. Completion of the foods program can lead to apprenticeship programs in the food industry.

Foods 10

Students learn safe and sanitary food handling procedures, equipment care, comprehension of recipes and the importance of efficient work habits. Following the Alberta curriculum students will learn about different areas of the food spectrum. Examples of modules covered include food basics, snacks & appetizers, contemporary baking, meal planning, etc.

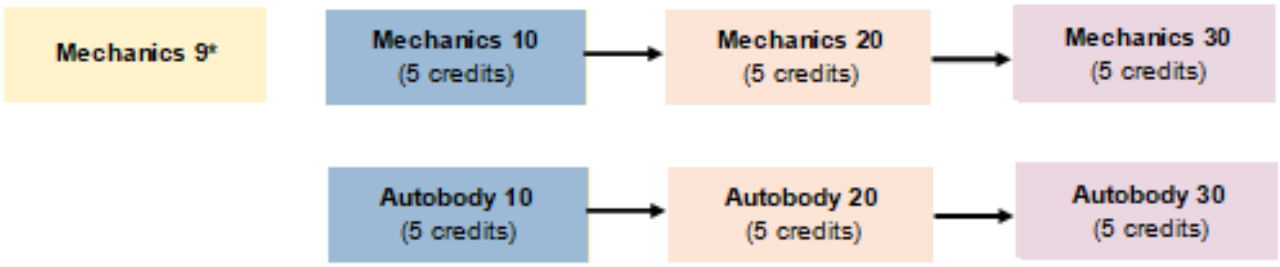
Foods 20

Students will build upon the skills previously introduced in grade 10 and then continue to advance their learning into modules such as cakes and pastry, yeast modules, and milk and eggs. Students will understand how to make intermediate level foods and continue to expand their knowledge in the culinary arts.

Foods 30

Students will continue to build on their knowledge previously learned in Foods 10/20. Those wanting to pursue a career in culinary arts will enjoy the challenge of Foods 30. These are advanced level courses and will push students to a new appreciation for Foods cookery.

MECHANICS



*Mechanics 9 is NOT a prerequisite for Mechanics 10 or Autobody 10.

**10 level courses are typically 5 credits, students can earn more or less credits based on module completion

***20/30 level courses are typically 5 credits, students can earn more or less credits based on module completion.

Mechanics 10

Students will earn 6-10 level credits through learning a number of different knowledge and skill sets that will enable them to build a strong foundation for taking mechanics in grade 11 and 12. The modules taught in grade 10 are also prerequisites for being able to participate in many of the modules in grades 11 and 12. Modules taken in grade 10 are Mechanics tools and safety, Vehicle service and care, Engine fundamentals, Structures and materials, Welding fundamentals, Electrical fundamentals.

Mechanics 20

Students will earn 5-6 credits that consist of a combination of 20 and 30 level modules due to the nature of mixed grade levels. However the modules placed in the course are based on class dynamics and need, these modules expand the level of learning to a more complex and advanced understanding of concepts, skills and knowledge beyond grade 10. Students also participate in a large number of shop projects to solidify this learning and students also have the opportunity to work on their own vehicles as well to help support their learning by way of a vested interest.

Mechanics 30

Students will earn 5-6 credits that consist of a combination of 20 and 30 level modules due to the nature of mixed grade levels in the class. However the modules placed in the course are based on class dynamics and need, these modules expand the level of learning that took place in Mechanics 20 to an even more complex and advanced understanding of concepts, skills and knowledge beyond grade 11. Students also participate in a large number of shop projects to solidify this learning and students also have the opportunity to work on their own vehicles as well to help support their learning by way of a vested interest.

Autobody 10

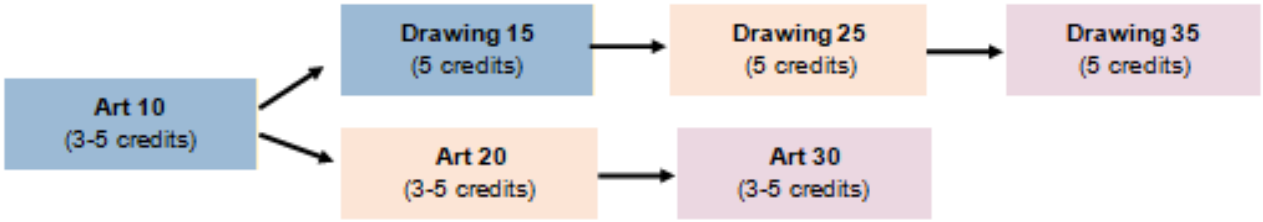
Students will earn 5-6 credits through learning the safety and fundamentals of auto body repair from assessing damage to making the appropriate repairs through use of auto body tools and products and panel replacement. Students will also learn about related welding and metal forming as well as spraying sealer, primer paint and clear coat. There is an opportunity for students to do project work that allows them to try using different paint products that generate different effects such as pearls and flakes as well as using an airbrush for custom paint work.

Autobody 20

Students will earn 5-6 credits through expanding on the safety and fundamentals of auto body repair learned in Autobody 10.In this class there is also opportunity for students to do project work that allows them to continue using different paint products that generate different effects such as pearls and flakes as well as using an airbrush for custom paint work. There is also an opportunity at this point for a student to work on their own vehicle from repair to paint if desired. This class will be a combination of 20 and 30 level modules.

FINE ARTS COURSES

ART



Musicians practice scales, hockey players practice game skills, actors practice improvisation and lines. Artists, like them, have fundamental activities that contribute towards their skill and control of techniques and media. Students who choose Art must be aware they will be required to practice some of the art basics. This can be challenging and difficult yet rewarding. Participating in drawing fundamentals and maintaining a sketchbook is expected at all levels.

As a fine arts course, Art 30 may be used for Post-Secondary entrance requirements for most programs. Students should check their post-secondary website to see if Art 30 qualifies.

A course fee applies to this option.

Art 10

In Art 10 students will explore a wide range of media with a focus on developing creativity in their art making. The major components of this course will consist of design, drawing, painting, printmaking, sculpture and art appreciation. Students will learn to follow the artistic process and apply their knowledge of basic design to communicate meaning and intent in their original artworks

Art 20

The Art 20 course is a continuation of the exploration gained through Art 10. Students will complete several major art projects and continue to explore mediums through 2- and 3-dimensional art. Students will have opportunities for more in-depth encounters with art history, art movements/styles to gain a better understanding of the language and the processes of art. Emphasis is placed on artist research, technical exploration and project planning.

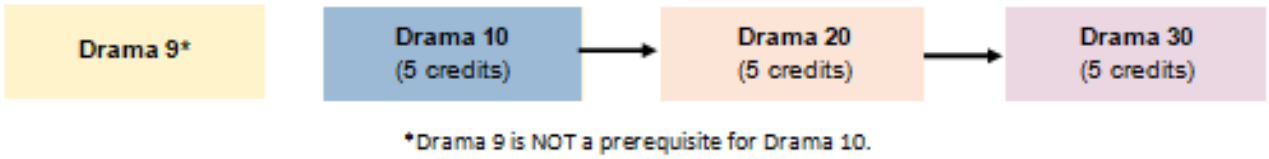
Art 30

The Art 30 course is a continuation of the exploration gained through Art 20. Students will complete several major art projects and continue to explore mediums through 2- and 3-dimensional art. Students will have opportunities for more in-depth encounters with art history, art movements/styles to gain a better understanding of the language and the processes of art. Emphasis is placed on building a portfolio creating authentic artworks and developing personal artistic style.

Drawing 15/25/35

Drawing class is for students who wish to develop the discipline of drawing. Students who have successfully completed Art 10 are able to take advantage of this excellent opportunity to fine-tune their skills. This is an opportunity to extend your knowledge and create exciting new projects!

DRAMA



*Drama 9 is NOT a prerequisite for Drama 10.

I am creating, performing, studying, critiquing and consuming drama as an art form! Students will learn to communicate in various ways and work creatively with others as they discover dramatic expression. They will develop both performance and technical skills, becoming more confident in themselves and their ability to work together. Students will enjoy the theatre experience, developing skills in eight dramatic disciplines. Through movement, speech, improvisation, acting, theatre studies, technical theatre design, playwriting and directing, they will express themselves creatively and work with others to bring dramatic situations to life.

The goals and objectives of the Drama 10/20/30 program are:

I. to acquire knowledge of self and others through participation in and reflection on dramatic experience.
II. to develop competency in communication skills through participation in and exploration of various dramatic disciplines.
III. to develop an appreciation of drama and theatre as a process and art form.

As a fine arts course, Drama 30 may be used for Post-Secondary entrance requirements for most programs. Students should check their post-secondary website to see if Drama 30 qualifies.

Drama 10

Drama 10 provides a basic introduction to skills and processes involved in creating and participating in theatre. Students will be given a foundation in ensemble, movement, stage composition, voice, and character work.

Drama 20

Drama 20 allows students to build on all of the skills and units they began to explore in Drama 10 with a greater focus on acting, technical theatre and design. Drama 20 will also allow students more diversity in the amount and type of projects and units that the student will be engaged in.

Drama 30

Drama 30 allows students to further build on the skills and units they have explored in Drama 10 & 20 with a greater focus on directing and leadership in a Drama classroom.

PHYSICAL EDUCATION/ HEALTH COURSES

CAREER EXPLORATION/HEALTH

*Health 9 is NOT a prerequisite for Career & Life Management

Health 9

Health and life skills involves learning about the habits, behaviours, interactions, and decisions related to healthy daily living and planning for the future. The aim of health is to enable students to make well informed, healthy choices and to develop behaviors that contribute to their well being and that of others. To achieve this aim, students require an understanding of self as the basis for healthy interactions with others and for career development and lifelong learning.

Career and Life Management (CALM)

I want to make good choices in life. Students will enhance their ability to make good choices today and in the future. They will examine health holistically: the emotional, intellectual, social, spiritual and physical dimensions. They will learn how to make responsible choices about money and other resources, and they'll learn that their decisions are based on their values and goals. Students will also continue to plot out their career path as they plan for life after high school.

PHYSICAL EDUCATION / SPORTS PERFORMANCE

*Physical Education 9 is NOT a prerequisite for Physical Education 10

Physical Education 9

Students will participate in dance, games, gymnastics, individual physical activities and activities outside of school, such as aquatics and outdoor pursuits. Through active and safe participation, they will understand what an active lifestyle involves and how their physical and emotional health will benefit from physical activity. will also discover how positive interactions, through fair play, leadership and teamwork, make physical activity more fun and productive.

Physical Education 10

What is my body capable of? Through activities in the school and community, your teen will explore their physical abilities and improve their fitness level. They will understand that fitness impacts well-being and body image. Communicating with others, your teen will develop a sense of fair play and exercise their leadership abilities. They will discover the importance of safe, active living for life; set goals; and challenge themselves as part of an active, healthy lifestyle. Courses may be worth 3, 4 or 5 credits.

Physical Education 20 & 30

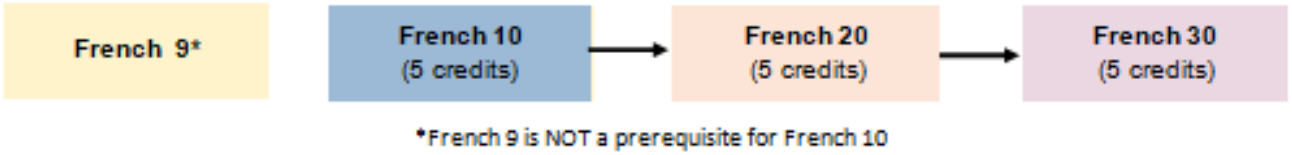
Fitness is fun and good for me. Through activities in the school and community, your teen will explore what they are capable of and improve their physical abilities. They will enjoy better fitness and well-being and an improved body image. Communicating with others, they will develop a sense of fair play and exercise their leadership abilities. Your teen will understand the importance of safe, active living for life; and they'll set goals and challenge themselves as part of an active, healthy lifestyle. Courses may be worth 3, 4 or 5 credits.

Sport Performance 15-25-35

In sports performance students will learn to optimize their level of physical fitness. They learn different types of training methods, and programs and develop their own training regiment based on that. They will also learn about possible careers related to sports and athletics, and learn the basics of sports injury management.

SECOND LANGUAGE COURSES

FRENCH



Even if a student has never spoken a word of French, through French as a second language they will use French to speak in simple terms about familiar things and to carry out simple conversations that reflect life experiences, such as buying an item or making a hotel reservation. They will explore Francophone cultures and understand the interaction patterns used by French-language speakers. This course sequence can prepare students to learn other languages.

French 10

French 10-3Y is the first year course in the French as a second language 3 year Alberta curriculum course, designed for grades 10-12. This course is designed for students who have no prior instruction in french, although having taken our French 9 course is helpful. Students will gain the ability to understand and express themselves in basic situations in french. After completing this course, students will have the ability to continue on to French 20-3Y and French 30-3Y.

French 20

French 20-3Y is the second year course in the French as a second language 3 year Alberta curriculum course, designed for grades 10-12. This course is designed for students who have completed French 10-3Y. Students will gain the ability to understand and express themselves in basic situations in french, and learn the skills of speaking, reading/ listening comprehension, and writing in french. After completing this course, students will have the ability to continue on to French 30-3Y.

French 30

French 30-3Y is the final course in the French as a second language 3 year Alberta curriculum course, designed for grades 10-12. This course is designed for students who have completed French 20-3Y. Students will learn the skills of speaking, reading/ listening comprehension, and writing in french. By the end of this 3 year program students can understand and express themselves in basic situations where the language is clear and based on familiar topics and structures.

SOCIAL SCIENCES

PSYCHOLOGY

Personal Psychology

Students will explore psychology from the perspective of the individual in greater depth, with a focus on elements of personality, behaviour, intelligence and perception

General Psychology

Students will gain a broad understanding of the many topics of study in psychology, including learning and thinking, conflicts and disorders, as well as career opportunities

LOCALLY DEVELOPED COURSE OFFERINGS

These courses will be added to the course selection form but will only run if there are an adequate number of requests for the course.

Fire Department Course

In this 3 credit program, students will learn about fire services operations including general knowledge and skills employed by firefighters in North America. All training is derived from the North American Fire Training (NFPA) 1001, NFPA 1002 and NFPA 472 standards of training. Practical as well as theory components exist within this program. Students should be fully prepared for both theory (in-class) as well as practical learning components of the High School Fire Services Program. This course is designed as a basic introduction to provide insight into the general operations of the Fire Services for students looking at or considering becoming a firefighter as a career. With both theory and practical components incorporated, each candidate is afforded the opportunity to learn both visually and by "hands-on". From operating an attack line from a ladder to applying a motion-restriction device to a patient to maintaining and operating fire apparatus, the participants in this program will have a direct look into the inner-workings and activities of the Fire Service that many could only dream of. Those who wish to pursue an education as a professional firefighter, a letter of recommendation will be drafted to accompany qualified candidates's application for admission to the post-secondary institution of their choosing (i.e: Emergency Services Academy located in Sherwood Park, Alberta, Fire ETC through Lakeland College in Vermilion, Alberta, Texas A&M located in Dallas, Texas.)

Topics covered in this program:

- Fire behavior (NFPA 1001)
- Personal Protective Equipment (NFPA 1001)
- Fire Department Communications (NFPA 1001)
- Self-Contained Breathing Apparatus (SCBA) (NFPA 1001)
- General Introduction to Hoses & Nozzles (NFPA 1001)
- Portable Fire Extinguishers (NFPA 1001)
- Equipment Cleaning and Checking (NFPA 1001)
- Driving/Operating Fire Apparatus (NFPA 1002)*
  *not always offered as part of the program due to availability of location

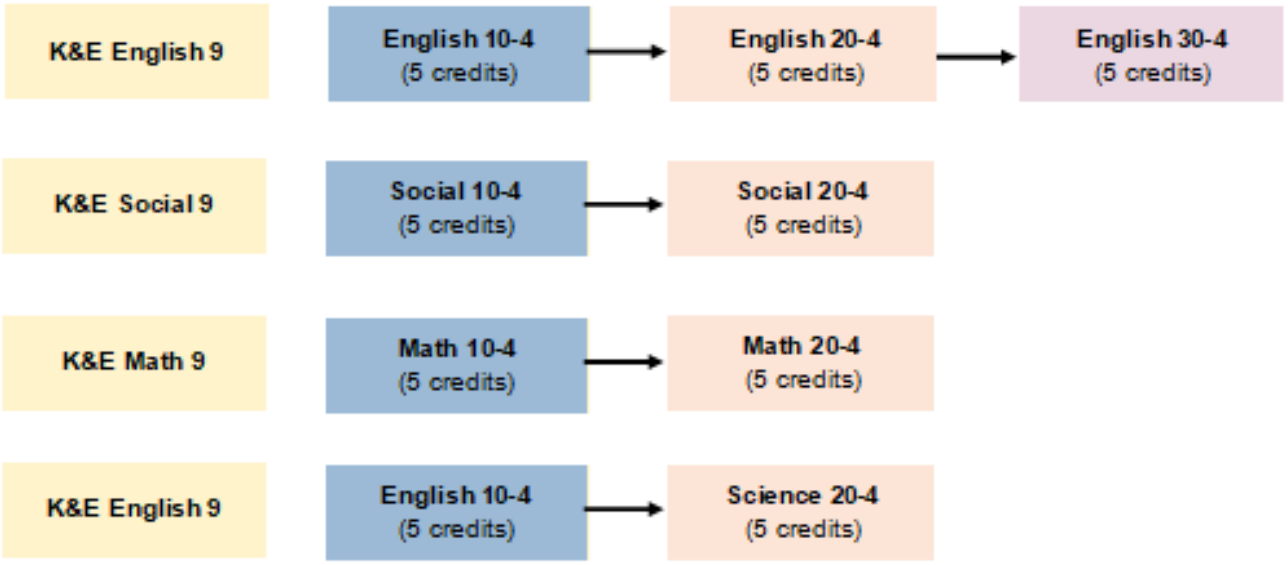
Minimum Requirements to take the course:

- Must be in Grade 11 or 12
- Must have a valid class 7 or 6 license to complete the driving component (if offered)
- Uniform Required (additional fees required)

***This course will be bundled with a minimum or 2 other single credit courses in order to ensure a 5 credit block. Students should be prepared to work in the SDL room on alternate days or terms depending on the delivery of the course.**

OTHER PROGRAMMING OPPORTUNITIES

KNOWLEDGE & EMPLOYABILITY



Knowledge & Employability Language Arts 9

Students will be shown additional strategies for success. They will listen, speak, read, write, view and represent to comprehend and respond to different oral, print and visual/media texts and to create their own texts. They will develop language, comprehension and communication skills by responding to oral, print and media texts/materials (e.g., stories, newspapers, magazines, advertisements, diagrams, media/films, websites) that have practical and everyday home, community and workplace applications.

Knowledge & Employability English 10-4

I want to develop language skills that will help me succeed. In Knowledge and Employability ELA 10-4, students who have experienced challenges or difficulty with their skills in ELA are shown additional strategies for success. Materials have practical applications for students and support development of reading comprehension, communication and other occupational skills. Students may also be required to create their own brief texts. This course is part of a sequence designed for students who may transition directly into the world of work, pursue further training/courses or pursue other opportunities that may not require post-secondary education.

Knowledge & Employability English 20-4

I want to continue to develop my language skills to be more successful in ELA. In Knowledge and Employability ELA 20-4, students who have experienced challenges or difficulty with their skills in ELA are shown additional strategies for success. Materials have practical applications for students and support development of reading comprehension, communication and other occupational skills. Students may be required to create their own brief texts. This course is part of a sequence designed for students who may transition directly into the world of work, pursue further training/courses or pursue other opportunities that may not require post-secondary education.

Knowledge & Employability English 30-4

I want to demonstrate clear language skills and success in ELA to support my goals for work and life. In Knowledge and Employability ELA 30-4, students who have experienced challenges or difficulty with their skills in ELA are shown additional strategies for success. Materials have practical applications for students and support development of reading comprehension, communication and other occupational skills. Students may be required to create their own brief texts. This course is the last in a sequence designed for students who may transition directly into the world of work, pursue further training/courses or pursue other opportunities that may not require post-secondary education.

Knowledge & Employability Social Studies 9

Grade 9 Knowledge and Employability Social Studies focuses on citizenship, identity and quality of life. Students will discover the important influences that government and economics have on their life. They will focus on the rights, roles and responsibilities of citizens in decision-making processes and in the Canadian justice system. Students will also explore issues related to immigration and will consider the impact of economic decisions on the quality of life experienced in Canada and in the United States. They will be provided with additional strategies for success in this course.

Knowledge & Employability Social Studies 10-4

What is globalization and how does it affect me? Knowledge and Employability Social Studies 10-4 students will look at the history of globalization and understand various viewpoints on the effects that globalization has on individuals, local communities and the world as a whole. Students who have experienced challenges or difficulty with their skills will be provided with additional strategies for success in the Knowledge and Employability -4 course sequence.

Knowledge & Employability Social Studies 20-4

What is nationalism and how does it affect us? In Knowledge and Employability Social Studies 20-4, students explore the development of nationalism as well as its effects, considering various perspectives on the idea of nation in Canada. They develop an understanding of the impact of nationalism on individuals, international relations and citizenship. Students who have experienced challenges or difficulty with their skills will be provided with additional strategies for success in the Knowledge and Employability -4 course sequence.

Knowledge & Employability Mathematics 9

Grade 9 Knowledge and Employability students

- connect number concepts and operations to career and workplace situations
- round numbers to the nearest unit (tenth and hundredth)
- describe multiples, factors, composites and prime factorizations
- represent numbers in expanded form, using powers of 10, and in scientific notation
- perform operations with 2-digit whole number multipliers and divisors, decimals, and fractions and mixed numbers with like denominators
- solve problems that involve adding and subtracting fractions with unlike denominators
- estimate and calculate percents and rates to solve problems
- estimate and calculate average to solve problems
- compare and order positive and negative numbers
- understand and solve problems, using algebra
- solve measurement problems related to perimeter, area, surface area, mass, volume and angle measurements
- measure, classify and draw angles and triangles and use scale to reproduce a 2-D shape
- identify first and second quadrants of a coordinate grid
- collect, interpret and display data in a variety of ways

Knowledge & Employability Mathematics 10-4

Knowledge and Employability Mathematics 10-4 students solve everyday problems involving numbers and percents; explore patterns, variables, expressions and equations to solve problems; and solve problems involving estimation, measurement and comparison of objects. Students use visualization and symmetry to explore objects, shapes, patterns and designs; develop and apply a plan to collect, display and analyze data and information; and connect mathematical ideas to their everyday lives. Students who have experienced challenges or difficulty with their skills will be provided with additional strategies for success in the Knowledge and Employability -4 course sequence.

Knowledge & Employability Mathematics 20-4

Knowledge and Employability Mathematics 20-4 students solve everyday problems involving numbers and percents, and decide if the processes used are reasonable. They explore patterns, variables and expressions, and interpret variables, equations and relationships, to solve problems in practical situations. They estimate, measure and compare objects; read and interpret scale drawings and maps; develop and apply a plan to collect, display and analyze information; and use probability and statistics to make predictions and decisions. In most of their studies, Mathematics 20-4 students connect mathematical ideas to their everyday lives. Students who have experienced challenges or difficulty with their skills will be provided with additional strategies for success in the Knowledge and Employability -4 course sequence.

Knowledge & Employability Science 9

Students will discover how chemicals interact with one another and the environment. They will explore transformations of energy in mechanical devices, such as flashlights, and create their own electrical circuits. Students will also gain an understanding of the diversity of living things and environments, and the impacts of human activity on this diversity. They'll consider the challenges of space exploration and ways that technologies used to study space, like telescopes and GPS, impact our lives on Earth.

Knowledge & Employability Science 10-4

What should I do to keep my body healthy? In Knowledge and Employability Science 10-4, students explore the digestive and circulatory systems of the human body. They investigate common chemicals used at home and in the workplace, and how to safely handle them. Students discover how force and heat energy are transferred in technologies they use in their daily lives, and they ask questions about how human activities affect the natural world. Students who have experienced challenges or difficulty with their skills will be provided with additional strategies for success in the Knowledge and Employability -4 course sequence.

Knowledge & Employability Science 20-4

How do seat belts keep me safe? In Knowledge and Employability Science 20-4, students gain an understanding of the applications of science skills and knowledge for success at home, at work and in the community. They investigate and classify simple chemical reactions; learn about energy conversions and conservation; and examine how social, environmental and genetic factors affect human health. They also apply their knowledge of moving objects and conservation of momentum to transportation safety. Students who have experienced challenges or difficulty with their skills will be provided with additional strategies for success in the Knowledge and Employability -4 course sequence.

SELF DIRECTED LEARNING

SDL is intended for students who are able to work independently **and** who are unable to fit a course into their schedule. Self Directed courses are considered based on a meeting with the Administration and based on the needs of the student. In the SDL classroom, the student has access to the SDL facilitator and the off campus teacher to get any help that is needed. Course outlines are set out just like any other courses in classes and deadlines are expected to be met. All assessments are done during class time and work is not to be taken home to complete. Attendance follows the FMHS policy.

Aboriginal Studies 10-20-30

The course is based on perspectives and worldviews of Aboriginal peoples. It includes the study of traditions and history of Aboriginal peoples in Canada, and particularly in Alberta. Student learning outcomes provide opportunities to examine such topics as governmental structures, literature, the arts and the sciences. Students must complete the prerequisite level course with a minimum 50% before progressing to the next level.

Forensic Studies 25 & 35

Forensic Science 25 - CSI anyone? Discover how evidence from crime scenes is gathered and analyzed. Explore the principles behind fingerprinting, breathalyzers, polygraphs, and DNA analysis. Apply what you learn to the analysis of real-life crimes, including the Laci Peterson murder, the infamous John Dillinger case, the Zodiac killer case, the O.J. Simpson case, the Atlanta Child Murders, and the tragic death of Princess Diana. Prerequisites are Science.

Forensic Science 35 - Dig deeper into the world of crime scene investigation. Learn about forensic anthropology and entomology; forensic toxicology; autopsies; ballistics; police protective equipment; police dogs; arson investigation; criminal profiling; investigation processes; and footwear, tire, and tool mark impressions. You'll also analyze real-life crime cases, including the Karla Homolka serial killings, the Washington sniper shootings, Clifford Olson, Paul Bernardo, Ted Bundy, Geoffrey Dahmer, the Mayerthorpe quadruple Mountie murder case, the North Hollywood Shootout, the Laci Peterson murder case, the Reena Virk murder case, the Jonestown mass suicide, and the Robert Pickton serial killings.

Personal Psychology

Students will explore psychology from the perspective of the individual in greater depth, with a focus on elements of personality, behaviour, intelligence and perception

General Psychology

Students will gain a broad understanding of the many topics of study in psychology, including learning and thinking, conflicts and disorders, as well as career opportunities

Experimental Psychology 35

Students will expand research and data analysis skills using methods situated within the field of psychology inquire into issues of importance to psychologists and design a research project

Abnormal Psychology 35

Students will learn about the historical emergence of the field of abnormal psychology and the accompanying theories to describe the causes of abnormal behaviour, including biological and environmental factors.

General Sociology 20

Students will explore the themes of culture, society and class as they relate to the discipline of sociology. They will learn about research methods in sociology and how to analyze society from an objective point of view

Workplace Safety Bundle

HCS 3000 -HCS 3000 is a mandatory Alberta Education prerequisite course for all Alberta high school students wanting to participate in the Work Experience Program or Registered Apprenticeship Program (RAP). HCS 3000 is about workplace safety systems and upon completion students will receive one credit.

HCS 3010 - HCS3010 is a mandatory Alberta Education prerequisite course for all Alberta high school students wanting to participate in the Registered Apprenticeship Program (RAP). Students explore workplace safety principles and practices, and apply these principles and practices to a variety of contexts. Prerequisite: HCS3000: Workplace Safety Systems.

AGR 3000 - In this course you will recognize and assess the hazards and learn about managing the risks of working in an agricultural environment. You will identify community resources that may be available to you to ensure that you develop safety awareness, and learn about ways to ensure your workplace is a safe environment to work in

Wildlife

Students will explore various wildlife concepts. Activities will include A study of Alberta, its natural regions, biological zones, land use/management, and comparative studies, lakes and rivers, historical use of wildlife; a study of the wildlife of Alberta and Canada, the change in ranges, extinct, extirpated, endangered & threatened, freshwater fisheries and finally how wildlife management works, employment in the management fields, role of hunters and fishers, economic value of wildlife, ecotourism, public opinion. Students will also explore a variety of equipment and activities.

Google Apps for Education

Students will complete learning activities to demonstrate knowledge and ability in word processing, digital presentations, spreadsheets, online citizenship, and managing online learning environments.

OFF CAMPUS OPPORTUNITIES

Green Certificate

I want to get a head start in a career in agriculture. Through the Green Certificate Program, Alberta senior high students can earn senior high school credits by enrolling in combinations of courses in an agricultural production specialization. Each of the Green Certificate specializations provides students with access to the first level of an agricultural apprenticeship. Students can progress in each specialization through two levels—technician level and supervisor level—and, if their career interests expand to management roles in agriculture, to a generic third level of the Green Certificate, the Farm Manager Program.

HCS3000 & AGR 3000 are prerequisites for the Green Certificate Program.

Registered Apprenticeship Program (RAP)

I want to begin working in a trade while still in high school. Students interested in one of Alberta's designated trades may be able to work as registered apprentices and take high school courses. They spend part of their time in school and part of their time in industry learning their trade and gaining valuable hours toward their apprenticeship record book (blue book).

HCS3000 & HCS3010 are prerequisites for the RAP Program.

Work Experience

I want to transition smoothly from school to post-secondary education or to work. Work Experience courses provide opportunities for school and community to combine resources to further students' career development and build their employability skills. In Work Experience, students will explore career interests and apply their knowledge, skills and attitudes in the workplace.

HCS3000 is a prerequisite for Work Experience.

DUAL CREDIT

Please contact the administration at the school for an updated list of dual credit courses available.