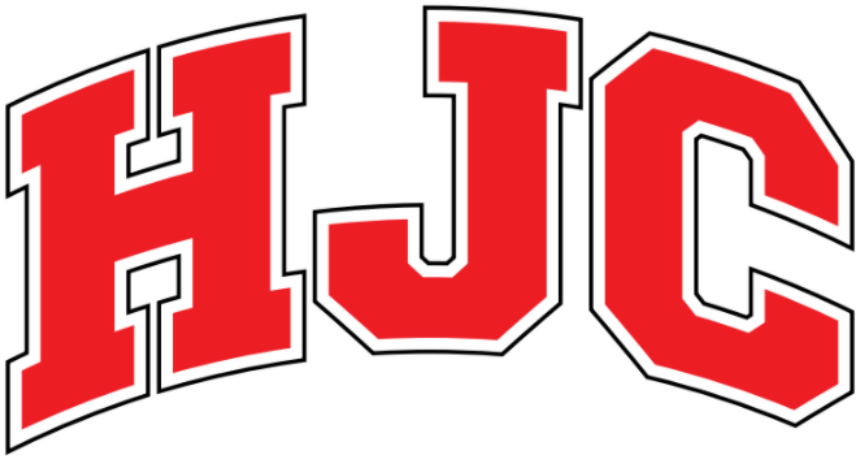

Grades 10-12

Course Descriptions

2023-2024

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ALBERTA HIGH SCHOOL DIPLOMA: GRADUATION REQUIREMENTS

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 or Mathematics 20-3)
SCIENCE – 20 LEVEL
(Science 20, Science 24, Biology 20, Chemistry 20 or Physics 20)
PHYSICAL EDUCATION 10 (3 CREDITS)
CAREER AND LIFE MANAGEMENT (3 CREDITS)

10 CREDITS IN ANY COMBINATION FROM THE COMPLEMENTARY COURSES BELOW:

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

AND

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)

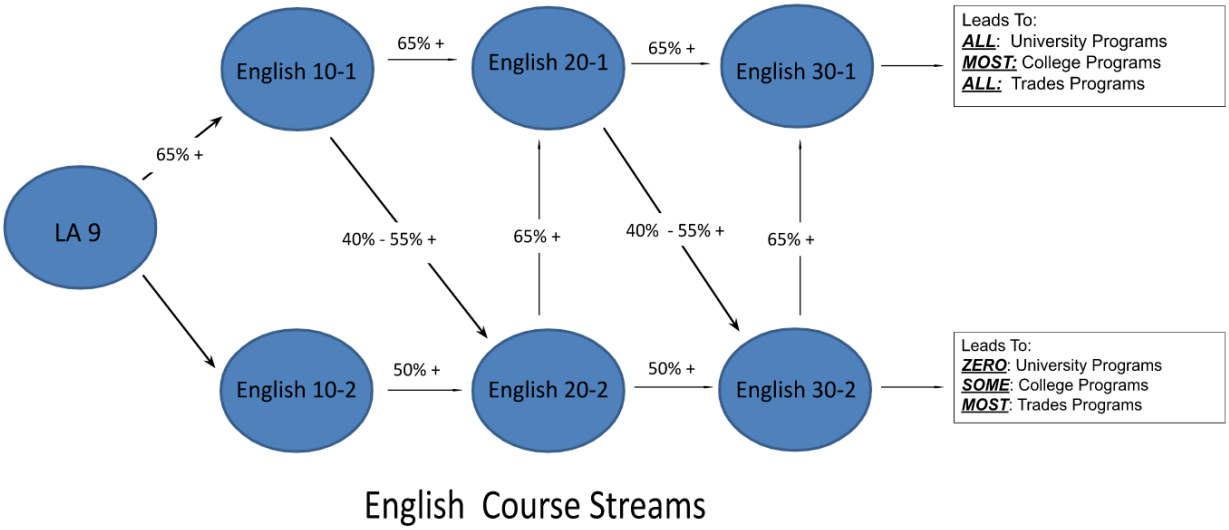
These courses may include:

- 30-level locally developed/acquired and authorized courses
- Advanced level (3000 series) in Career and Technology Studies courses
- 30-level Knowledge and Employability courses
- 30-level Registered Apprenticeship Program courses
- 30-level Work Experience
- 30-level Green Certificate

English courses:

The purpose of the high school English program is to assist you in acquiring the skills, attitudes, and knowledge needed to meet the everyday requirements of life. You'll communicate confidently and competently, and deepen your understanding and appreciation of literature. English Language Arts courses are required in Grades 10, 11 and 12 and every student must complete English 30-1 or 30-2 in order to graduate. There are two aims of the high school English Language Arts (ELA) program: to provide you with an understanding and appreciation of a broad range of texts, and to enable you to use language effectively for a multitude of purposes. ELA focuses on six areas of language arts: listening, speaking, reading, writing, viewing, and representing.

There are two main course sequences in English:
In each course sequence, you can expect to have thought-provoking discussions about a range of genres (including novels, films, short stories, poetry, plays, non-fiction and other visual and performative works). Both sequences allow you to engage with the English language in meaningful ways and will open many doors down the road. It is important to talk to your counselors to make sure that your chosen course sequence will allow you to pursue your future academic and life goals.



English Course Streams

English 10-1, 20-1 and 30-1 revolve around how students engage with texts on a personal and critical level; therefore, students will be required to analyze complex pieces of literature and discuss themes, meaning, and purpose. Students who take this course sequence will spend much of their time studying, creating, and analyzing a variety of complex literary texts in preparation for university programs after Grade 12.

Recommended Prerequisite for 10-1: 65%+ in ELA 9
Recommended Prerequisite for 20-1: 65%+ in ELA 10-1
Recommended Prerequisite for 30-1: 65%+ in ELA 20-1

English 10-2, 20-2 and 30-2 allow you to improve your grammar and sentence-building skills through a variety of assignments in functional, creative, and analytical writing. Similar to the -1 course sequence students will engage with a wide range of texts, but there will be less emphasis on literary analysis and more of an emphasis on connecting to text on a personal level. Both course sequences meet diploma requirements and require that you write a diploma exam upon completion of the 30 level course. Not all

post secondary institutions accept English 30-2 for entry, so make sure you're familiar with entrance requirements for the institutions and programs you're considering after Grade 12.

Prerequisite for 10-2: 50% in ELA 9
Prerequisite for 20-2: 50% in ELA 10-1 or 10-2
Prerequisite for 30-2: 50% in ELA 20-1 or 20-2

French Immersion courses:

FLA 9, 10, 20, 30
Ce cours est composé de quatre parties:

- La compréhension orale: Vous serez capable de comprendre des textes oraux et de décoder des messages sonores dans des produits médiatiques pour répondre à un besoin d'information, un besoin d'imaginaire, de divertissement et d'esthétique.
- La compréhension écrite: Vous serez capable de comprendre des textes écrits et de décoder des messages visuels dans des produits médiatiques pour répondre à un besoin d'information, un besoin d'imaginaire, de divertissement et d'esthétique.
- La production écrite: Vous serez capable de rédiger des textes correctement pour transmettre de l'information selon votre intention de communication. Vous serez capable de rédiger des textes correctement pour répondre à un besoin d'imaginaire, pour proposer une vision du monde et pour explorer le langage.
- La production orale: Vous serez capable de parler clairement et correctement pour transmettre de l'information selon votre intention de communication. Vous serez capable de parler pour explorer le langage et pour divertir.

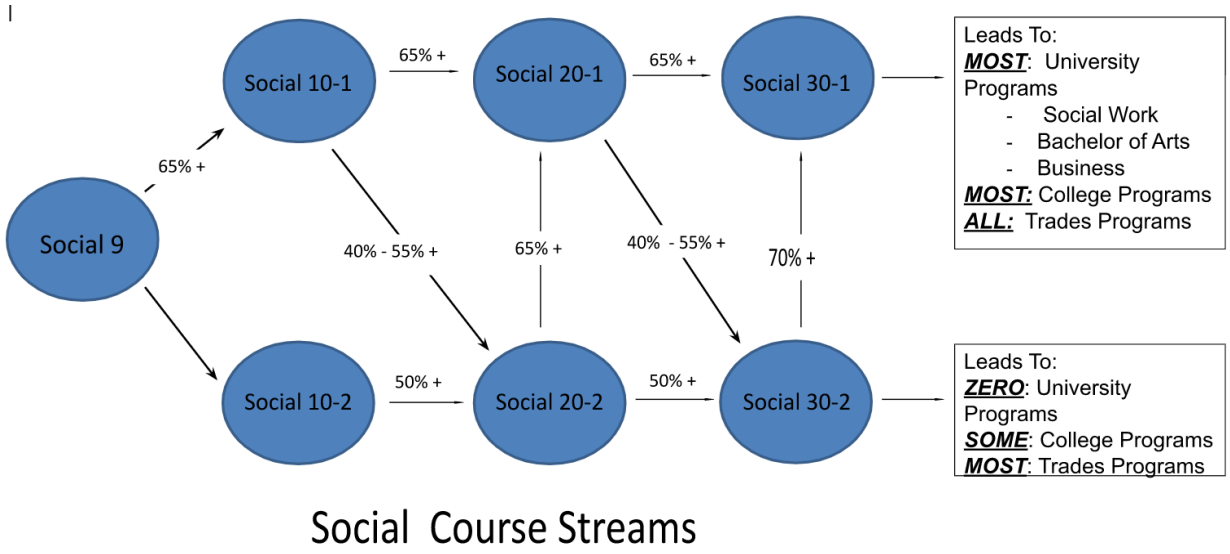
Prerequisite for FLA 9: 50% in FLA 8
Prerequisite for FLA 10: 50% in FLA 9
Prerequisite for FLA 20: 50% in FLA 10
Prerequisite for FLA 30: 50% in FLA 20

Études sociales 10
This is the equivalent of Social Studies 10-1 for French Immersion students. This course focuses on developing critical thinking skills and rigorous analysis of concepts and skills related to Globalization.

Études sociales 20 This is the equivalent of Social Studies 20-1 for French Immersion students. This course focuses on developing critical thinking skills and rigorous analysis of concepts and skills related to Nationalism.

Social Studies courses:

The high school Social Studies program is designed to engage you in active and responsible citizenship while you learn about the world around you. Upon completion of the program, you'll be expected to understand consequences and interactions in an increasingly globalized world within a Canadian context. The goal of the Social Studies program is to promote a sense of belonging and acceptance as you engage in active and responsible citizenship. The program has a strong focus on Canadian history, and you will also learn about the world around you. Social Studies is an essential course in Grade 10, 11 and 12, and every student must complete Social 30-1 or 30-2 in order to graduate.



Social Course Streams

There are two main course sequences in Social Studies:

Social Studies 10-1, 20-1 and 30-1 allow you to examine the relationships among globalization, nationalism, ideologies, citizenship, and identity to enhance skills for your citizenship in a contemporary world. The expectations for Social 10-1, 20-1, and 30-1 are more rigorous---particularly in areas of concept development, critical thinking, and skill development. These courses are intended for students who are aiming to pursue higher level post secondary education.

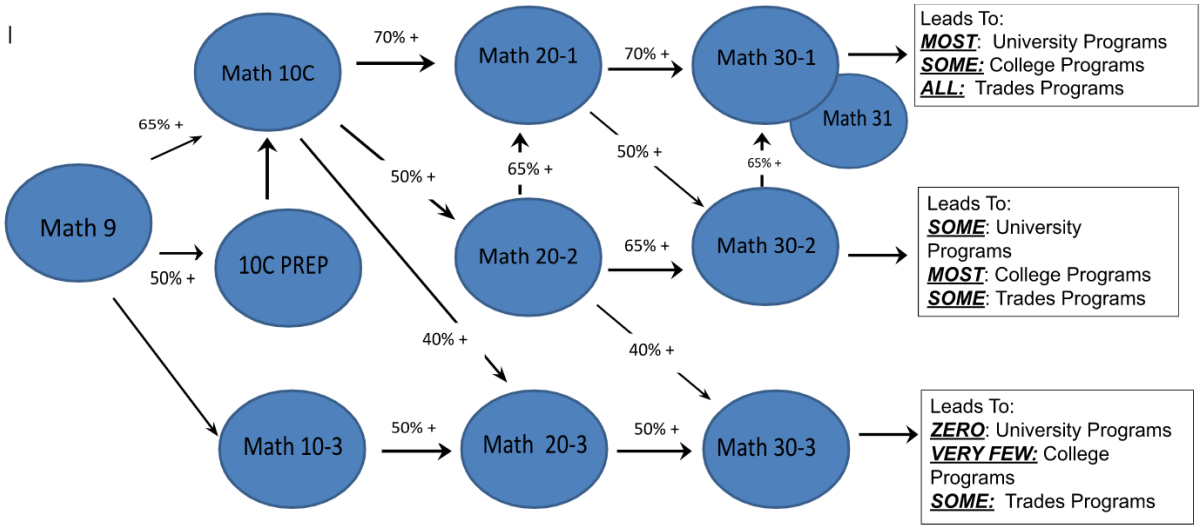
Recommended Prerequisite for 10-1: 65%+ in SS 9
Recommended Prerequisite for 20-1: 65%+ in SS 10-1
Recommended Prerequisite for 30-1: 65%+ in SS 20-1 or 70%+ in SS 30-2

Social Studies 10-2, 20-2 and 30-2 is a course sequence that explores historical aspects and the relationships among globalization, nationalism, ideologies, citizenship, and identity. Both courses meet graduation requirements and require that you write a diploma examination upon completion of the 30 level course. The expectations for Social Studies 10-2, 20-2 and 30-2 are less rigorous and prepare you for life as a Canadian citizen.

Prerequisite for 10-2: 50% in SS 9
Prerequisite for 20-2: 50% in SS 10-1 or 10-2
Prerequisite for 30-2: 50% in SS 20-1 or 20-2

Mathematics courses:

The high school Mathematics program is designed to prepare you to solve problems, communicate and reason mathematically, make connections between mathematics and its applications, appreciate and value mathematics, and make informed decisions as a contributor to society. When it comes to math, it's important to choose courses appropriate to your abilities, interests, and future goals. Your previous math marks will also help to indicate which courses are most appropriate for you.



There are three main course sequences in Mathematics:

Mathematics 10C (Common) This course is the starting point for both -1 and -2 course sequences, and will prepare you for entry into postsecondary programs that may require math. Topics include algebra and number systems, measurement, and relations and functions.
Prerequisite: 65% in Math 9

Math 10C Preparation (Competencies in Mathematics 15): The purpose of Competencies in Mathematics 15 is to improve student mastery of mathematical skills, concepts, and ideas. Students will be introduced to the essential outcomes of Math 10C and work through them at a slower pace than in a traditional 10C course. This course is intended for students who passed Math 9, but do not feel ready to enter Math 10C.

Mathematics 20-1 and 30-1 prepares you for entry into math and science postsecondary programs. Topics include algebra, measurement, relations and functions, trigonometry, permutations, combinations and binomial theorem.
Recommended Prerequisite for 20-1: Math 10C (70%)
Recommended Prerequisite for 30-1: Math 20-1 (70%) or Math 30-2 (65%)

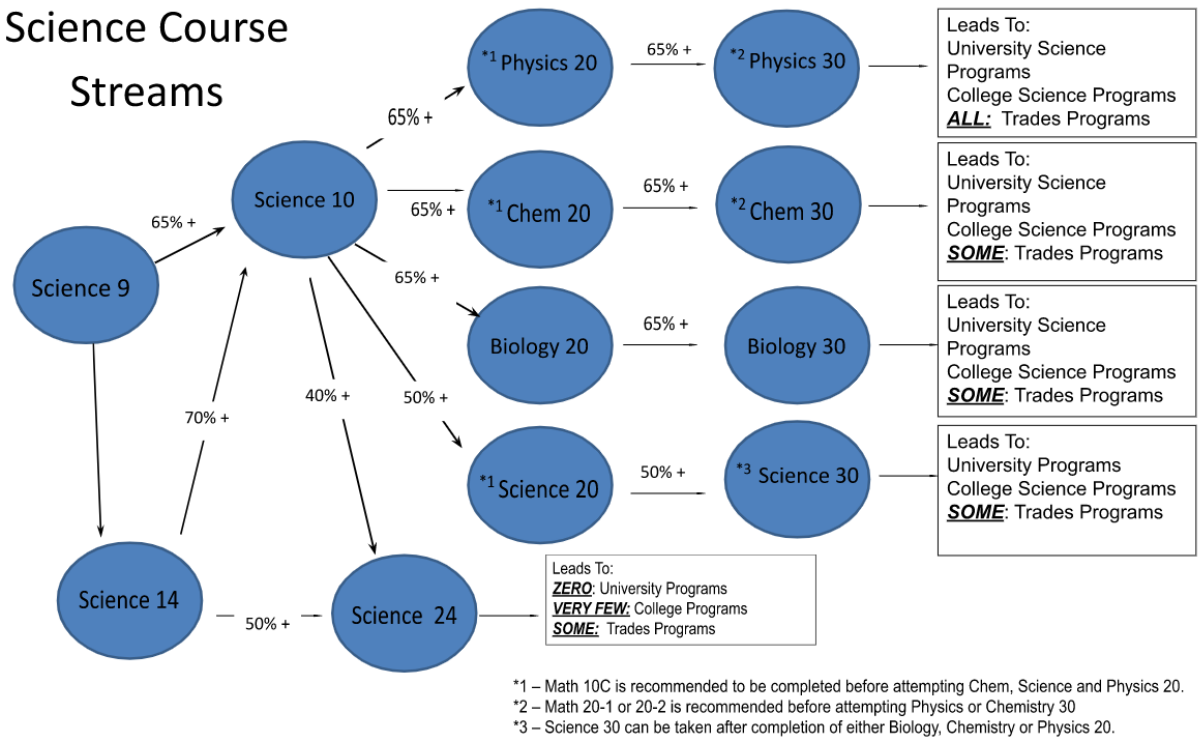
Mathematics 20-2 and 30-2 prepares you for post secondary studies in fields other than math or science, including most trades. Topics include geometry, measurement, number sense and logic, logical reasoning, relations and functions, statistics, and probability.
Recommended Prerequisite for 20-2: 50% in Math 10C
Recommended Prerequisite for 30-2: 50% in Math 20-1 or 65% in Math 20-2

Mathematics 10-3, 20-3, and 30-3 prepares you for entry into some trades and for direct entry into the workforce. Topics include algebra, geometry, measurement, number sense, statistics, and probability.
Recommended Prerequisite for 20-3: 50% in Math 10-3
Recommended Prerequisite for 30-3: 50% in Math 20-3

Mathematics 31 is an advanced mathematics course that prepares you for post secondary programs that recommend or require calculus as an entrance requirement. Math 31 includes a comprehensive review of Math 10C, Math 20-1 and Math 30-1. If you're considering Math 31, you'll need to take Mathematics 30-1 first.
Recommended Prerequisite: 70%+ in Math 20-1

Sciences courses:

The high school Science program is designed to assist you in gaining the scientific understanding necessary to be an effective member of society. Learning opportunities are made meaningful so that students can relate science to their lives both inside and outside of the classroom. The Science program consists of many courses, and students have several choices based on their interests, abilities, and future plans. Science courses provide you with facts, principles, concepts, and skills to give you a better understanding of the world around you. After Science 10, you can choose to take Science, Biology, Chemistry, or Physics depending on your interests, abilities and future goals. You'll need to successfully complete at least one of these courses at the 20 level in order to obtain a high school diploma.



*1 – Math 10C is recommended to be completed before attempting Chem, Science and Physics 20.
*2 – Math 20-1 or 20-2 is recommended before attempting Physics or Chemistry 30
*3 – Science 30 can be taken after completion of either Biology, Chemistry or Physics 20.

Science 10 is the prerequisite for all academic sciences. This course provides you with a unified view of the biological, chemical, physics, and earth sciences and an awareness of the connections among them. The four topics covered are energy and matter in chemical change, energy flow in technological systems, cycling of matter in living systems, and energy flow in global systems.
Recommended Prerequisite: 65%+ in Science 9 or 70%+ in Science 14

Biology 20 and 30 focuses on the study of Life! In Biology 20 we begin to explore the function of human systems from the digestive system to the circulator, while the ecology and evolution units extend your prior learning from Science 10. Biology 30 continues to grow your understanding of the human system including the nervous, reproductive, and endocrine, all while expanding your prior knowledge of genetics and population change.
Recommended Prerequisite: 65% in Sci 10.
Recommended Prerequisite: 65% in Bio 20.

Chemistry 20 and 30 is the study of matter and its changes, and emphasizes the context of science by considering the interrelationships among science, technology, and society. You are given an opportunity to explore and understand the natural world and to become aware of the profound influence of chemistry on your life.
Recommended Prerequisite for Chem 20: 65%+ in Sci 10 & 65% in the Sci 10 Chem unit, and Math 10-C
Recommended Prerequisite for Chem 30: 65%+ in Chemistry 20 and Math 20-1 or Math 20-2

Physics 20 and 30 involves the study of matter and energy and their interactions. This program considers the interrelationship between science, technology, and society. Physics 20 and 30 will help you understand the physics principles behind natural events you might experience and the technology you use in your daily life (for example in Physics 20: free fall & projectiles, frictional forces, planetary & satellite motion, waves & sound; in Physics 30: electrostatics, magnetic fields & aurora, light & lasers, nuclear physics). Physics applies the language of mathematics in its use of measurements, units, formulas, trigonometry and graphing skills.
Recommended Prerequisite for Physics 20: Minimum 65% in Sci 10 & 65% in Math 10-C or Math 20-2
Recommended Prerequisite for Physics 30: Minimum 65% in Physics 20, and Math 20-1 or Math 20-2

Science 20 and 30 are ideal if you are interested in science and plan to use the program for trades programs or post secondary entrance into arts or humanities programs. Science 20 and 30 integrate concepts related to chemistry, biology, physics, and Earth sciences. Science 20 can also serve as a bridging course for additional skill development between Science 10 and Biology 20, Chemistry 20, and Physics 20. Topics in Science 20 include Ecology (solution chemistry, bio-geo-chemical cycles), Geology (deep time, plate tectonics, earthquakes, fossil fuels, climate & evolution), and Transportation (organic chemistry, redox, vehicle motion & safety). Topics in Science 30 include Biology (circulatory & immune systems, genetics), Chemistry (acids/bases, organic & environmental chemistry), Energy (comparing energy sources & systems, combustion & nuclear energy), and Physics (electrical circuits, electromagnetism)
Recommended Prerequisite for Sci 20: 50% in Science 10 and Math 10C
Recommended Prerequisite for Sci 30: Sci 20, Bio 20, Chem 20, or Phys 20 and Math 10C

Science 14 and 24 are general programs that allow you to gain scientific literacy in the areas of maintaining personal health and safety, making informed decisions regarding energy, and the environment---while meeting the credit requirements for an Alberta high school diploma. These courses do not fulfill requirements for university,college, or trades programs.
Recommended Prerequisite for Sci 24: 50% in Sci 14 or Sci 10

Career and Life Management (CALM)
This is a mandatory course requirement to graduate and is generally taken in the Grade 10 year. Job Preparation and HCS 3000 make up the remaining two credits of this total five credit class.

The aim of senior high school Career and Life Management (CALM) is to enable students to make well informed, considered decisions and choices in all aspects of their lives, and to develop behaviours and attitudes that contribute to the well-being and respect of self and others now and in the future. CALM is the core course for health literacy at the senior high school level in Alberta. In CALM, students continue to work toward becoming “responsible, caring, creative, self-reliant and contributing members of a knowledge-based and prosperous society”.

CALM is broken into three distinct parts: Personal, Resource, and Career Choices.

Job Prep, for one credit, assists students in developing a resume and cover letter as well as being introduced to interview skills. Further career research and goals for graduation are focused on in this segment utilizing the My Blueprint program which students have previously been introduced to in Grade 9.

HCS 3000, for one credit, is a course that all students must have before they may take advantage of seeking extra credits through Work Experience. It is primarily a course based on safety in the workplace and looks at many necessary components related to thriving in a workplace setting.

Complementary Courses

Drama courses:

Drama 10
This class is an introductory class, but we will also explore theatre as a way to improve performance and technical skills at the next level. It will be a new course for those who had Drama 9, but will offer brand new Drama students an introduction to theatre as well. This course will examine acting basics, creative movement scenes (think slow-motion fight sequencing), improvisation, lighting and soundboard introductions, and scriptwriting/analysis. Prerequisite for Drama 10: n/a

Drama 20/30
This everyday course will explore advanced acting techniques and playwriting. There will also be in-class opportunities for Drama 30s to direct fellow classmates in scene work as they learn directing basics. We will examine the technical theatre interests of the students as they explore costume, set, stage management, lighting, sound or properties. We will dig into theatre history to build a foundation of knowledge as we explore eras and theatre studies. In this class you will become a better performer, an excellent collaborator, make friends, and have fun doing it!
Prerequisite: Drama 10/20

Visual Art courses:

Art Studio 10
The focus in the course is on *building* the skills from all the things you may have explored in Art 9--- it's about getting better at using different media, skills, and techniques, and eventually beginning to develop your own style. * Cool fact: you DON'T need Art 9 as a prerequisite to join Art 10; however, it is highly recommended. We will work on drawing, painting, printmaking, and sculpture.
Prerequisite: n/a

Senior Art Studio 20/30
This course focuses on refining artistic skills and finding your style to create a body of work or portfolio. The course is for the seriously passionate creative maker/ artist/ designer who may be heading into a visual arts studio program, design, or curatorial course at the postsecondary level. We begin the term with some structured projects to continue refining our skills and techniques, and move towards independent projects---determined by students and facilitated by the instructor and you through a proposal.
Prerequisite for Art 20: Art 10
Prerequisite for Art 30: Art 20

Music courses:

Instrumental 10 (Band 10)
This is a performance based program that grows previously developed skills from Grade 9. The Instrumental 10 program is currently run in conjunction with the Instrumental 20 & 30 programs. This allows the Grade 10 player to have the opportunity to play with more experienced players, making an excellent learning environment. Through the development of musical skills, students will demonstrate creative expression through performance and musical literacy. Travel opportunities in the senior band can include multi-day trips and further destinations.
Prerequisite: n/a

Instrumental 20 (Band 20)
This course continues to develop ensemble musical performance through establishing stronger technical skills. Instrumental 20 allows players to become more confident in their range, tone quality, technique, speed, and repertoire interpretation. Students develop an understanding of melody, harmony, and expression. Travel opportunities in the senior band can include multi-day trips and further destinations.
Prerequisite: Instrumental 10

Instrumental 30 (Band 30)
The course focuses on the culmination of skill development, reaching a level of excellence in performance acquired through dedication and perseverance. Students develop an ability to be lifelong players, with the ability to make intellectual and aesthetic judgments based on critical listening and analysis. Students increase their performance ability through skills, range, articulation, rhythm, and written and aural interpretation. Travel opportunities in the senior band can include multi-day trips and further destinations.
Prerequisite: Instrumental 20

General Music 10 (Guitar 10)
This course can be the first class that students experience playing guitar. There are two required components: theory and music making. The elective components include: composition, history of western music, music and technology, world music, careers in music, jazz appreciation, and popular music.
Prerequisite: n/a

General Music 20/30 (Guitar 20/30)
There is a continuation of skill development, performance requirements, and small ensemble experiences that occur in these courses. Students at this level are interested in pursuing a growth in their personal performance. There is a continuum of focus in melody, harmony, rhythm, timbre, form, texture, dynamics, style, theory and notation, ear training, and music making.

Prerequisite:
Guitar 10 for Guitar 20
Guitar 20 for Guitar 30

Social Sciences courses:

Psychology 20
This course is designed to give students an introduction to the study of psychology, as well as an opportunity to apply psychological concepts to their own lives. Students are encouraged to take full advantage of the opportunity to investigate this field, as it may provide assistance with personal and career interests. Upon successful completion of this program, students will receive 3 credits in General Psychology 20 and 3 credits in Personal Psychology 20.
Prerequisite: n/a

Topics in each course include:
General Psychology:
Introduction & History of Psychology (Behavioral, Cognitive, Psychoanalytic, Humanistic Theories, Nature vs. Nurture), Consciousness (Meditation, Sleeping, Altered States of Consciousness), Social & Interpersonal Psychology (Relationships, Conflict Archetypes & Conflict Resolution)

Personal Psychology:
Sensation & Perception (The Senses, Perception, Cognitive Dissonance, Illusions), The Mind-Body Connection (Nervous & Endocrine Systems, Stress, Positive Psychology), Personality, Behavior & Intelligence (Theories & Testing, Processes of Thinking & Learning)

Aboriginal/Indigenous Studies 10
The focal point of Aboriginal/Indigenous Studies 10 is the wealth and diverse nature of Aboriginal/Indigenous languages and cultures. The course reflects the perspectives and worldviews of various Aboriginal/Indigenous Peoples. It includes the study of traditions and history of Aboriginal/Indigenous Peoples in Canada and particularly in Alberta. This course is available to grades 10-12.

The four themes for the course are:
1. Origin and Settlement Patterns
2. Indigenous Worldviews
3. Political and Economic Organization
4. Indigenous Symbolism and Expression

The course is innovative and engaging, and allows students to learn about issues and history from an Indigenous perspective. Students will have the opportunity to engage in a variety of cultural experiences. Elders and guest speakers will be invited in to share Indigenous knowledge as well as any other opportunities that arise during the course.

Forensic Science 25/35
Students will investigate and evaluate the processes involved in the collection and preservation of crime scene evidence. Four units shape student learning by advancing their understanding of the following concepts:

1. Physical Evidence
2. Forensic Toxicology
3. Investigative Procedures
4. Forensic Psychology

As you progress through Forensics, you will investigate and analyze the strengths and limitations of forensic evidence analysis. This is a combined 25-35 six credit course, which aims to provide hands-on experiences through microscope analysis, blood spatter experimentation, and investigations into true crime.

Paleontology 15
This is an introductory palaeontology course that provides a basic knowledge of the major groups of ancient organisms including biological and geological interpretations of their fossil record. Students will also be introduced to the techniques and science of palaeontology, and of course lots of fossils! Included is a field component provided by the ATCO Learning Centre at the Royal Tyrrell Museum in Drumheller.
Prerequisite for Palaeontology 15: n/a

Big History 15
Where did we come from? What causes change? Where are we heading?
Big History takes on these questions that originate with the dawn of time, and gives students a framework to tell the story of humanity's place in the Universe. It's more than a history course. Big History helps students see the overall picture and make sense of the pieces: it looks at the past from the Big Bang to modernity, seeking out common themes and patterns that can help us better understand people, civilizations, and the world we live in today. By teaching students to explore these connections, and to effectively question, analyze and postulate; it provides a foundation for thinking not only about the past, but also the future and the changes that are reshaping our world. Throughout the course, students encounter challenging ideas and questions and learn to connect ideas across 13.8 billion years of time and in an array of disciplines. The course asks students to thoughtfully and rigorously engage with the claims they encounter along the way.
Prerequisite for Big History 15: n/a

Leadership, Character and Social Responsibility (Ethics) 15/25/35
This course enables students to acquire an understanding of the nature of leadership and philosophical and ethical reasoning. It encourages students to develop and apply their knowledge and skills while exploring ethical principles and the theories of moral philosophy. The course will cover at least three of the following branches: ethics, social and political philosophy, and practical logic and reasoning. Students will develop critical thinking and ethical reasoning skills as they formulate and evaluate arguments related to a variety of questions and theories concerning social responsibility. They will also develop research and inquiry skills related to the study and practice of ethical leadership, character building, and moral responsibility. This is a five credit course.
Prerequisite for Ethics 15: n/a

Industrial Education Courses:

Introductory Construction 10
Career and Technology Studies (CTS) is a competency based curriculum that focuses on introducing the student to Trades, and Manufacturing & Transportation. The student will work on individual modules that cover prerequisite curriculum in Construction Tools & Materials, Product Management and Solid Stock Construction. These prerequisites form the foundation for learning in Advanced Construction and Introductory Welding. This is a 3 credit course.
Prerequisite: n/a

Advanced Construction 20/30
Career and Technology Studies (CTS) is a competency based curriculum that focuses on expanding and exploring individual skills in the Construction sectors. The student will work on individual modules that build on prerequisites covered in Introductory Construction. Students will gain experiences in Cabinet Making, Furniture Making, Building Construction, and Concrete Work. Student creativity is further encouraged and developed at this level utilizing personal strengths and interests. This is a five credit course.
Prerequisite: Introductory Construction

Introductory Mechanics/Fabrication & Welding 10:
Students complete three modules in this course:
MEC1015: MECHANICS TOOLS & MATERIALS
Students develop knowledge, skills, and attitudes in the safe use of specialty hand tools, measuring tools, and fasteners. Specialty precision measuring tools such as Micrometers and Vernier Calipers will be used as motors are disassembled. The student will learn what tools to use and how to use them in various applications. A great majority of these tools will be used in Engine Fundamentals.
MEC1040: ENGINE FUNDAMENTALS
Students investigate and describe operating principles, construction, and applications of engines. Students will disassemble and assemble a 4 stroke engine a number of times during the term, and will describe all working processes and components.
MEC 1910 : PROJECT A
Students apply the knowledge gained from MEC1015 & MEC1040 to identify/diagnose/repair & service a small engine. Students are encouraged to bring a small engine to school, and following accepted industry practices, return the engine to factory operating conditions where applicable. The outcomes for the student are to be able to repair and/or service their small engines at home on a seasonal basis. The skills learned in Grade 10 prepare the student for a total 8 Cylinder engine rebuild in Grade 11.
Prerequisite: n/a

Advanced Mechanics/Welding 20/30
Career and Technology Studies (CTS) is a competency based curriculum that focuses on expanding and exploring individual skills in the Mechanics and Fabrication sectors. The student will work on individual modules that build on prerequisites covered in Introductory Mechanics. Our goal is to focus on 'tearing down' and rebuilding a small block 350 engine, and restore it into working condition. Fabrication techniques are explored on a personal interest level covering areas such as oxy/acetylene welding, basic electric welding, Mig welding, thermal and plasma cutting, sheet metal fabrication, and foundry techniques. Students will also be able to explore individual interests in vehicle servicing, maintenance auto detailing, and Auto Body Mechanics. This is a five credit course.
Prerequisite for Mechanics: MEC 1015, MEC 1040
Prerequisite for Fabrication: FAB 1010 (This is needed for welding and will be covered

Foods courses:

Foods 10
Each credit will take approximately 2.5 weeks, during which a minimum of 5 cooking projects will be completed. There are additional units for students who finish ahead of the class and they will potentially have the opportunity to gain further credits. The units of study are as follows:

FOD 1010: Food Basics (this 1st credit is a prerequisite for all other Foods courses in high school)
FOD 1020: Contemporary Baking
FOD 1030: Snacks & Appetizers
FOD 1040: Meal Planning
FOD 1050: Fast & Convenience Foods

Advanced Foods
Each credit will take approximately 2.5 weeks, during which a minimum of 5 cooking projects will be completed. There are additional units for students who finish ahead of the class and they will potentially have the opportunity to gain further credits. The units of study are as follows:

FOD 2030: Food Decisions & Health
FOD 2040: Cake & Pastry
FOD 2050: Bread Products
FOD 2090: Creative Cold Foods
FOD 2070: Soups & Sauces
FOD 2170: Regional Cuisine
FOD 2920: Project C
FOD 2120: Meal Planning 2
FOD 2060: Milk and Eggs
FOD 3910: Project D
FOD 3030: Adv. Baking
FOD 3040: Yeast Products
FOD 3060: Food Presentation
FOD 3050: Adv. Soups & Sauces
FOD 3160: International Cuisine
FOD 3920: Project E
FOD 3010: Food for Life Stages
FOD 3070: Short Order Cooking

* If time, students may pursue more than 5 credits.
Prerequisite: Foods 1010. Students without this prerequisite may be admitted into advanced foods at the teacher's discretion. The student must demonstrate the initiative to be able to do a bit of additional work in a somewhat independent fashion.

Multimedia and Programming courses:

Introductory Digital Design 15
This course serves as a precursor to the advanced COM Tech classes. Half of the course will be focused on visual composition and basic principles of digital design. Students will be introduced to Adobe Suite Programs like Illustrator and Photoshop, and will be able to create their own stickers with their new design skills! The second half of the course will be focused on creating Audio/ Video productions with Adobe Audition and Premiere Pro. This is a 3 credit course.
Prerequisite: n/a

Advanced Digital Design 25/35
In this 20/30 level class students will continue to develop their skills in the Adobe Suite. We will use Illustrator and Photoshop to create high fidelity graphics to print and display around the school. There will be many opportunities to work on personal and teacher proposed projects in this class. Some projects may include designing the yearbook cover, grad hoodies, school displays, and other personal items for students to take home. This is a five credit course.
Prerequisite: Introductory Digital Design 15

Introductory Robotics and Coding 15
The Introductory Robotics course introduces students to basic programming as well as problem solving skills. In this course, students will use Arudino to build their foundational skills in robotics. This includes designing, building, and programming robots to complete various tasks. The programs will start out quite simple, but will progress to more complicated projects. In order to build the skills and attitudes necessary for future success, students should be prepared for a semester of logical thinking, problem solving, hands-on activities, and teamwork. This is a 3 credit course.
Prerequisite: n/a

Advanced Robotics and Coding 25/35
HJC Robotics will create opportunities for students to engage in planning, computational thinking, and collaborative problem solving through both unplugged and online activities. Using vEx Robotics classroom tools, students will further develop their programming skills while working in groups to accomplish tasks and activities to build their knowledge with the four elements of computational thinking: decomposition, pattern making, abstraction, and algorithms to help support coding for Robotics. This is a five credit course.
Prerequisite: Robotics and Coding 15

Introduction to Creative Media & Marketing 15
In this introductory multimedia class students will cover three credits introducing them to the power of audio and video editing. Students will create storyboards, learn video camera basics, and video editing skills to create a short film edited with text and sound. Students will also learn podcasting basics and have the opportunity to create their very own podcast with Adobe Audition. Lastly, students will use After Effects software to create animated videos, they can see their own digital creations come to life with movements, sound and text through intensive keyframing.

Advanced Creative Media & Marketing 25/35
Students in this class will deep dive into programs like Adobe Premiere Pro and After Effects. We will be learning how to plan, capture and edit film. Students will learn how to add keyframes to their vector graphics to make them come alive! A small group of students in this class will be selected to create the grad video for the year which is a semester-long project consisting of storyboard planning, script writing, interviewing, filming, editing, and producing a film to show during graduation. This is a five credit course.
Prerequisite: Introductory Digital Design 15

Introduction Digital Photography 10
This course is designed to introduce students to DSLR cameras and their settings and functions using different camera lenses and photo equipment like tripods, and basic photo editing using Adobe Photoshop. Students will have practical, hands-on experience with Canon cameras both indoors and outdoors, and work in dark room scenarios to create light painting shots and long exposure photos. Students will practice shooting in Shutter Priority, Aperture Priority, and eventually work towards using their digital camera in full Manual mode. Students will build skills editing, organizing image files, and shooting various photo types including sports action shots, macro photos, portraits, and personal photos to build a portfolio.

Intermediate Digital Photography 20
This course is designed to build upon DSLR camera skills learned in introductory level photography. Camera functions will be explored more in-depth and more off-camera equipment will be introduced, such as remote flashes. Students will continue building their skills in Adobe Photoshop editing and image management, metadata, and file organization. They will practice taking photos indoors and outdoors, and in the darkroom with still life set-up, portrait lighting, and props. Students will review Aperture and Shutter Priority shooting modes and work primarily in Manual mode. Students will be responsible for taking part in athletic photography for sports teams, both headshots and team photos, for the yearbook. Students will build a website to practice marketing and building their photography portfolio.
Prerequisite - Intro Photo 10

Advanced Digital Photography 30
This course is designed to treat photography as a business with greater emphasis on personal style in photos, refining photography skills as a whole, and demonstrating versatility of photography types with a website of portfolio images. It is geared towards the serious photographer considering a career in freelance photography. It focuses on working with real clients to build customer relations, marketing, and website building to promote a personal style in one's photography portfolio. Students will continue to use cameras and various equipment to photograph indoors and outdoors, in the darkroom, and in various locations around town for local businesses and families. Students will be responsible for building client relationships, scheduling bookings, and fulfilling customer briefs. They will also work on product photography, lighting, and assist in the photographing of athletics and other events, and editing and curating those images for the yearbook.
Prerequisite - photo 20

<u>Health Science courses:</u>

Introduction to Health Science
This course is intended for students who are interested in a career in the medical field. It is also highly recommended for students wishing to learn how to care for athletic injuries.

Health Science 15 is broken into 3 separate classes:
Injury Management 1: The role of an athletic trainer and the basic injuries that they treat and prevent is presented. Knowledge about medical terminology and anatomy is also presented.
First Aid/CPR : Students learn and demonstrate first-aid procedures such as CPR with an automatic external defibrillator and dealing with emergency situations. Students will learn about how to prevent injuries and conditions. They will also learn how to protect themselves from infectious disease and injury while practicing First-Aid. Successful candidates will receive a Red Cross Standard First-Aid/CPR level C with AED certification. Certification is valid for 3 years.
Health Service Foundations: Students learn about what determines good health and wellness. They are to develop a basic understanding of anatomy, physiology, and other medical terminology. The prevention of bloodborne pathogens is presented, as is an examination of the public health system.
Prerequisite: n/a

Advanced Health Science
This is a 5 credit course intended to help students who wish to continue with medical or kinesiology studies in a post-secondary institution. The course will also specifically help students who wish to continue with sports first-aid pursuits. The 5 different CTS credits are:
Courses - Cardiovascular Systems
- Musculoskeletal Systems
- Nutrition and Wellness
- Injury Management 2
- Technical Foundations in Injury Management

Prerequisite - Health Science 15

Esthetics courses:

Esthetics 10
This course focuses on skincare, long hair design, and nails. Modules include:
-COS 1010 Personal & Professional Practices (Prerequisite for the following modules)
-EST 1070 Manicuring 1- Basic manicures. **You must be willing to have your nails done. This means that you cannot have artificial (gel, acrylic, or fake nails) through the duration of this unit.**
-EST 1020- Skin Care Practices- Looks at skin types and basic care for the skin. **You must be willing to have your makeup removed and work closely to a client's face.**
-COS 1020: Long Hair Design 1: Basic braiding skills are the focus of this module.

Esthetics 20/30
Intermediate and Advanced Esthetics goes beyond the basics learned in Esthetics 10 and allows students to specialize in several areas of esthetics. Students must have taken Esthetics 10 to complete these modules and **MUST** have enjoyed working with clients in close proximity as in Advanced Esthetics you may work with clients brought in from the community.
Prerequisite: Esthetics 10

Esthetics 20:
-EST 2030 Facials
-EST 2050- Make-up
-EST 2070 Manicuring 2
-COS 2020 Long Hair Design 2
-EST 3040 Hair Removal
-Other modules may be substituted

Esthetics 30:
-EST 3010 Spa Awareness
-COS 3020 Long Hair Design 3
-EST 3045 Hair Removal Client Services
-EST 3070 Pedicuring
-EST 2035 Facials Client Services
OR
-EST 2055 Make-up Client Services
-Other modules may be substituted

Spanish courses:

Spanish 10
This class is an introduction to the Spanish language, and you can take Spanish 10 without having taken Spanish before. This is an opportunity to learn about the Spanish language, culture, and food in a fun and interactive classroom. For some students with prior knowledge of the language and cultures, it offers an opportunity for renewed contact. Students will be able to use a repertoire of words and phrases in familiar contexts, within a variety of lexical fields, including: greetings, personal information, descriptions, professions/occupations, clothing, the body, family and friends, school, time and calendar, activities, transportation, weather, celebrations, and an introduction to the Spanish speaking world (geography). There may also be a visit to a Spanish restaurant in Red Deer!
Prerequisite: n/a

Spanish 20
This course is a continuation of Spanish 10. Students will be able to: use a repertoire of words and phrases in familiar contexts, within a variety of lexical fields, including: foods, restaurants, market shopping, fashion and fads; sports and exercise; vacations and travel; social life; health and safety (physical states/visit to the doctor); daily routine; an examination of the cultural diversity in the Spanish speaking world; any other lexical fields that meet their needs and interests. There will also be the annual visit to a Spanish restaurant in Red Deer!
Prerequisite: Spanish 10

Spanish 30
Students expand on their knowledge from Spanish 10 and 20, and move into exploration of the language, both verbally and in the written format. Special attention will be paid to conversation and real-life situations, including arts, entertainment and literature; music; relationships (friends/ clubs/activities/sports/ hobbies); cultural celebrations; driving; folk tales, legends and fables; children's games/ childhood activities; technology; the world of work; and the environment. There will also be the annual visit to a Spanish restaurant in Red Deer!
Prerequisite: Spanish 20

Literacy and Reading courses:

Reading 15/25
This class is designed for students who would like to improve their reading comprehension skills. Many students who have taken this class have improved their reading comprehension by at least half a grade level. Students will be working through the Pearson Education's Leveled Literacy Intervention Program. This course is 100% participatory based, therefore strong attendance and a willingness to improve your skills is essential to succeed in this course.
Prerequisite: n/a

Physical Education courses:

Yoga 15
This class offers students the opportunity to study and practice yoga as a subject in its own right at H.J. Cody. It is designed to safely introduce students to the basic postures(asanas), breathing techniques (ujjayi), and relaxation methods of yoga. It will also introduce students to the health benefits of yoga, explore the historical roots of yoga, and provide a basic understanding of anatomy and physiology as it applies to this discipline. Students will develop an enhanced appreciation of yoga, and continue to develop their physical literacy, increased flexibility of movement, and strength. The goal of Yoga 15 is to help students develop a strong foundation for further Yoga practice which can be a lifelong pursuit.
Prerequisite: n/a

Yoga 25/35
Students will safely experience Yoga postures (asanas), breathing techniques, and mindful/meditation methods. Students will continue to build foundational knowledge revolving around the historical roots of yoga, and anatomy and physiology of the body as it relates to the practice. Students will develop an enhanced appreciation for and acceptance of their bodies. This course is designed to allow students to experience the benefits of increased flexibility, strength, focus, and range of motion. Through continued practice, students will relieve stress, learn to relax, and experience the health benefits of a yoga practice.
Prerequisite: Yoga 15 recommended

Physical Education 10
Students will experience and participate in a number of different activities showing the benefits of being physically active. Students will be assessed throughout the semester on participation, cooperation/leadership, attitude/effort, and basic fundamental movement skills. There are a number of indoor activities students will participate in such as volleyball, curling, basketball, dance, small group games, basic CPR training, badminton, and a variety of fitness activities. Some of the outdoor activities will include football, soccer, cross-country skiing, broomball, softball, soccer, golf, and track and field.

Physical Education 10 - Noncompetitive
This course is intended to foster lifetime fitness and recreation pursuits in a less competitive environment. Some of the typical activities are fitness, yoga, basic CPR training, walking, cross-country skiing, dance, self-defense, curling, softball, badminton, bowling, nutrition, and outdoor games and recreation. Students will earn their PE 10 credits through this course.

*A Physical Education 10 course is mandatory for graduation requirements.

Physical Education 20/30
This option is focused on students who enjoy being active in a number of different activities. The goal of this class is to show students a number of different activities that they can actively participate in to continue to foster the understanding of the importance of lifelong fitness. Students are required to **volunteer** a **minimum of 5 hours** within the HJ Cody Athletic Department. Students will participate in various activities similar to Phys Ed 10 with the possible addition of a hiking/camping trip, Mountain Biking, Wall climbing, Adaptive Phys Ed activities, Cross Country ski trip, workouts at local fitness centres, and leadership activities. Students will be assessed on skills, participation, cooperation/leadership, and attitude/effort.

Sports Performance 15
This course is intended for student athletes who want to learn how to maximize the physical and mental aspects of the sports they compete in regularly.
This course is delivered through the 3 CTS Modules:

REC1040-Foundations for Training 1: Students learn training principles for both health and performance related fitness goals. They will then develop and perform a fitness plan with measurable goals for either performance or health related goals.

REC1050-Sport Psychology 1: Students assess the impact of mental fitness on optimal sport performance and motivation. Students examine and demonstrate strategies to strengthen mental fitness including relaxation, visualization, and positive self-talk. Concentration within a competition will be examined and a strategy to maximize it will be developed.

HSS1020-Nutrition and Wellness: Students learn about the importance of nutrition and hydration with regards to competition and training. Food choices will be evaluated and how to use food labels will be explored. Most of the course will be done through a number of projects.

Sports Performance 25/35
This is a 5 credit course. It is intended for students who are in competitive sports and want to improve their physical and psychological skills. The course is separated into 5 different one credit CTS courses.
Prerequisite: Sports Performance 15

The potential courses include:

Sports Performance 25
REC2015: Athletic Development
REC2040: Foundations for Training 2
REC2045: Training for Core Muscles
REC2050: Sports Psychology 2
REC2910: Rec Project B

Sports Performance 35
REC3015: Flexibility Training
REC3025: Cardiovascular Training
REC3030: Speed & Agility
REC3045: Periodization
REC 3050 Sports Psychology 3
REC3019: Rec Project C

Outdoor Education courses:

Introduction Outdoor Education 10
Students develop the motivation and commitment to work toward the responsible use of forests, land, water, and wildlife. Students will develop attitudes and knowledge applicable towards careers in environmental conservation and eco-tourism. Students are provided with learning opportunities through which they can discover their interests in practical and purposeful ways. Students need to be prepared to be outside in all weather situations and a variety of temperatures.

Areas of focus (modules) for Environmental and Outdoor Education 10 are:

- Introduction to Wildlife (WLD1010): Students develop the attitudes, skills, and knowledge related to wildlife and ecosystems, and an understanding for the need to manage wildlife.
- Wilderness Navigation (WLD1060): Students develop the attitudes, skills, and knowledge in wilderness navigation to enhance outdoor experiences.
- The Tourism Sector (TOU1010): Students analyze the organizational structure of the tourism industry at local, provincial, national, and global levels. Students will perform introductory investigations of employment opportunities in tourism.

Online Dual Credit courses:

ACT 1011 Accounting Principles 1: (Semester 1)
Students will gain an introduction to financial accounting focusing on the accounting cycle and the preparation of financial statements. Topics include accounting for merchandising activities, internal control, accounting for cash, temporary investments, accounts receivable, inventories, cost of goods sold, and current liabilities.

ACT 1012 Accounting Principles 2 (Semester 2)
This course is a continuation of ACT 1011 to allow for additional study of accounting at an introductory level. Topics include capital assets, long term liabilities, partnership accounting, accounting for corporations, financial analysis techniques, as well as the cash flow statement using various technologies.
*Prerequisite: Students must have successfully completed ACT 1011

AHT 1050 Intro to Veterinary Profession (Semester 1)
Students will become familiar with selected animal health organizations and will adhere to the regulations of veterinary medicine in Alberta. Students are introduced to strategies and techniques for managing self and interacting with others. Students will examine animal welfare and ethical issues. This course provides students with foundational veterinary medical terminology they will use throughout their career.

AHT 1140 Veterinary Practice: The Team Connection (Semester 2)
Students will become familiar with the aspects of the service cycle within a veterinary clinic. Students will explore veterinary software and their specific application to operating a veterinary practice. They will apply communication skills to create positive experiences for veterinary clients.
*Prerequisite: Students must have successfully completed AHT 1050

ATG 1008 Solving Technology Problems (Semester 1)
Students will engage in the problem-solving process using current hardware and software tools for applied data-driven problem solving. Through data analysis, algorithmic problem solving, and technical memo writing students will work to solve a technical agricultural issue. Programming/Coding and Microsoft Excel spreadsheets (graphing/figures/charts) will be key skills learned and put into action making a Zumo robot perform a set task. Prior coding skills are not required, but students should be comfortable with math (algebra and polynomials at minimum Grade 10 level). As well, students will require perseverance to work hard in the trial and error process involved with learning to program/code. Students may need to spend more time on an assignment if the coding requires further problem solving. This course may need a little extra commitment by the student to be successful. It is a great course for those looking to grow their technology skills.
*Prerequisite: Students should have successfully completed Math 10C.

ATG 1007 Agriculture Electronics and Control Systems (Semester 2)
Students will investigate foundations of control systems, electronics, and practical applications in precision farming. Through experiential learning, students will identify and troubleshoot components within hardware and devices, demonstrate uses/applications of geospatial technology, test control systems and their role in product application, evaluate hardware and software, program farm equipment, and demonstrate a proven process for identifying/troubleshooting components in Agricultural Technology equipment, and interpret digital diagnostic data.
*Prerequisite: Students interested in taking this course should have completed Math 10C & ATG 1008

HAT 1255 Accommodation Management (Semester 2)
Students will gain an understanding of the psychology of travel, tourism sectors, the role of key industry players, and contemporary issues in ecotourism, sustainability, and business operations of various facilities with a focus on the analysis of the service and operations from a guest perspective.

MKG 1021 Global and Sustainable Tourism (Semester 2)
Students will develop an understanding of marketing concepts, principles and practices. Topics examined include the influence of environmental factors on the marketing process, marketing strategy development, marketing mix formulation and adjustment for pricing, promoting and distributing appropriate products and services to selected markets.

HRT 1700 Producing Horticulture Crops (Semester 1)
Students research and assess food and ornamental field crop production markets, locations, materials, and processes to achieve a sustainable enterprise.

EVS 1210 Applied Ecology (Semester 2)
Students will be provided an introduction to ecological principles at the species, population, community and ecosystem levels. Specific application of ecology to sustainability and the management of forest and grassland ecosystems are studied.

SPM 1260 Introduction to Sports Management (Semester 1)
Students will analyze various management models and organizational structures within the sport and recreation industry. Content areas include professional, amateur, Olympic, and intercollegiate sports.

SPM 1020 Training for Performance (Semester 2)
Students will learn about various aspects of training for performance. They will analyze the basic science behind activity, energy systems, and macro-cycles in sport training. Consideration will also be given to diverse populations, training facilities, equipment, schedules, budgets, as well as individual and team training preferences.
*Prerequisite: SPM 1260

MEDT 211 Medical Terminology 1 (Semester 2)
This self-directed introductory course enables the learner to use and understand the medical terminology common to most allied health personnel. By learning prefixes, suffixes, and word roots, the learner will be able to build, use, and spell medical words that relate to body systems and body organization. Common abbreviations and symbols are also included.