École secondaire Foothills Composite High School / Alberta High School of Fine Arts


# REGISTRATION 

 HANDBOOKCOURAGE | COMMITMENT | INTEGRITY
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# WELCOME TO FCHS INTRODUCTION 

The purpose of this handbook is to provide students and families with an outline of courses and programs offered at FCHS. The decisions students make while planning their high school program will have a lasting effect on their future. This handbook is designed to help students choose high school courses appropriate for their future plans. Students are advised to plan their programs taking into consideration previous school grades, requirements for a high school diploma and the requirements for education beyond high school.

ESFCHS/AHSFA staff is dedicated to engaging the creativity of a student's mind through authentic and meaningful experiences that intrigue the imagination. An educator can embrace diversity and celebrate individual talents by establishing supports for and collaborating with colleagues to facilitate an environment responsive to educational challenges. ESFCHS/AHSFA school is determined to empower students through a holistic approach that promotes collaboration, and inclusion that fosters respect and trust between students, teachers and families.

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# ALBERTA HIGH SCHOOL DIPLOMA REQUIREMENTS 

An Alberta High School Diploma is awarded to a student who completes 100 credits subject to the following requirements.


[^0]A full course load consists of 8 full courses. Spares will only be awarded to grade 11 and 12 students who are in good credit standing and approved by the administration.
Minimum expectations per semester for each grade level are as follows:

| GRADE 10 | Full Course Load | 40 or more credits |
| :--- | :--- | :--- |
| GRADE ELEVEN | 7 Courses minimum | 35 or more credits |
| GRADE TWELVE | Appropriate courses to complete graduation with no less than 10 <br> credits a semester. |  |

## repeating Courses due to falling Grade or to improve a mark

FCHS does not have the resources to provide a second opportunity for students to retake a course after receiving a grade that is below passing (50\%) OR they have successfully completed a course and want to improve their grade. Students who have completed a course and want to improve their mark or have been unsuccessful at passing are encouraged to retake the course in summer school.

## REGISTRATION IN A HIGHER-LEVEL COURSE

Students are not encouraged to fast-track their high school program. Three years are allocated for students to complete their high school diploma, and we encourage students to take this time to develop both intellectually and emotionally.

## EDSEMBLI - STUDENT PORTAL (PROGRESS \& CHOOSING COURSES)

Students can login into their student portal to view their mark books and progress in their classes. Edsembli is also used to choose their classes for the next grade level they are entering.
Quick Link: https://sis.edsembli.com/WebAdmin/AB/FSD/UI/Account/Signln
${ }^{* *}$ Login is through student school e-mails (First Name.Last Name@gm.fsd38.ab.ca)
** First Time Login: "Click on Forgot Password" Then "OK" to request a password reset e-mail, go to school g-mail with a 'single use' link to reset password. THIS CAN ONLY BE USED ONCE.

## EDSEMBLI - PARENT PORTAL OF PROGRESS

> Parents and guardians are encouraged to sign in with their login information (e-mailed to them through our main office) to view their child's progress in each course. Parents can visit our school website to log into Edsembli. If a parent login is unknown or not working, they can contact the main office (403-938-6116)

Quick Link: https://www.foothillsschooldivision.ca/foothillscomposite

## MYPASS - Students Need to Create an Account !

Students enrolled in high school are encouraged to track their progress toward graduation using myPass. myPass is an Alberta Education service that allows high school students to have direct access to their educational information including:

- View and print Detailed Academic Report (DAR) --- see how many credits earned
- View Progress towards high school credential I (Diploma or Certificate)
- Order High School transcripts
- View Diploma Exam marks

Quick Link: https://public.education.alberta.ca/PASI/mypass/welcome
** When signing up for MyPass - USE PERSONAL E-MAIL! DO NOT use school e-mail accounts as those e-mails are taken away at graduation.

## POST-SECONDARY ADMISSION REQUIREMENTS

Entrance requirements to universities, colleges and technical schools vary greatly and can change from year to year. The best way to determine which courses a student will need for entrance is to start to research programs they are interested in. MyBlueprint is an excellent resource tool to start!

## University Entrance:

- FIVE 30 Level courses which at least 4 must be considered academic by the specific university are required.
- English 30-1 is always required.
- Grade 12 academic sciences (usually 2) and Math 30-1 will be mandatory for post-secondary study in science or math areas (and some Business Programs)
- Math 30-2 is generally accepted for study in Humanities, Arts, Nursing, and many other areas of the Social Sciences.
- Some universities require FIVE academic subjects for admission.


## College Entrance:

- A high school Diploma is a general requirement.
- Programs of study vary greatly in terms of specific course requirements.
- It is important to carefully examine entrance requirements for a program of interest.


## Technical School Entrance:

- A high school Diploma and specific Grade 10, 11 or 12 academic courses for entry to specific programs of study are generally required for entrance.
- Several programs for technical schools require Grade 12 Math and Science
- Requirements are specific to the program of study, so it is important to carefully examine entrance requirements for the program of study.


## FCHS ADVANCED PLACEMENT COURSES (AP) - MATH AND ENGLISH .

The Advanced Placement Program (AP), is an internationally recognized enrichment program that offers acceleration and challenge to motivated and gifted students. It prepares students for the transition from high school to university and beyond.

This enriched academic programming is designed to provide high-achieving students with post-secondary course/material exposure in a high school setting. Students who complete an AP course can write an internationally recognized examination prepared and graded by the College Board.

Successful completion of Advanced Placement exams permits students to obtain credit in first-year university courses at many colleges and universities around the world.

## AP REGISTRATION AND PREREQUISITES

- The recommended prerequisite for Grade 9 students is a minimum of $75 \%$.
- Students must be highly motivated and passionate about the subject area
- Teacher recommendation and an entrance exam will also be used to determine enrollment
- Grade 10 students may choose to register in Math 10C AP and/or English 10-1 AP

The course order is subject to change based on course enrollment and school timetable.

| Grade 10 | Grade 11 |  | Grade 12 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Semester 1 | Semester 2 | Semester 1 | Semester 2 |
| Math 10C AP | Math 20-1 AP |  | Math 30-1 AP | Math 31 AP |
| English 10-1 AP |  | English 20-1 AP | English 30-1 AP |  |

## UNIVERSITY RECOGNITION OF ADVANCED PLACEMENT (AP)

The AP Program is a global academic program offered in over 100 countries around the world. More than 600 universities recognize AP exam scores for admission, credits and placement. In Canada alone, over 100 universities and colleges accept Advanced Placement exam scores.

- AP Canada website for a complete listing and specific details: https://apcollegeboard.org/
- College Board website: https://apstudents.collegeboard.org/

The following are a few popular Alberta universities for students and the links to their AP policies:
The University of Calgary (UofC):

- https://www.ucalgary.ca/future-students/undergraduate/transfer-credit/highschool\#:~:text=Advanced\ Placement\ (AP),part\ of\ the\ evaluation\ process.

The University of Alberta (UofA):

- https://www.ualberta.ca/admissions/undergraduate/resources/ap-students/advanced-standing-apcourses.html?
Mount Royal University (MRU)
- https://www.mtroyal.ca/Admission/AdmissionRequirements/advanced-placement-courses.htm


## MyBLUEPRINT - Viewing Post-Secondary Opportunities

MyBlueprint is an education planner/tool that is student-friendly and allows for interactive education and career/life planning. Students can easily navigate through their MyBlueprint account to:

- Plan high school courses and pathways
- Learn more about themselves using 520+ assessments
- Explore post-secondary opportunities across Canada
- Explore and compare occupations
- Create resumes, cover letters and budgets.

QuickLink: https://myblueprint.ca/

## FOOTHILLS DIGITAL SCHOOL (FDS) - ONLINE

Foothills Digital School (FDS) offers full-time educational online learning for students in grades 1-12. Skilled and caring staff facilitate this innovative, high-quality learning experience. Learners meet the outcomes as outlined in The Alberta Programs of Study. Foothills Digital School learning is designed to provide greater flexibility in when and where students can access their learning.
Students communicate with teachers and the principal directly through email, chat, virtually or in person.
FDS is Available to:

- All students with an Alberta address
- Returning grade 12 's who are upgrading and adult learners.
- High school students within the Foothills School Division can request to take ONE course through their Academic Advisor with Administration and parent approval.
Quick Link: https://www.foothillsschooldivision.ca/fds/page/4785/foothills-digital-school-formerly-hub-home


# ALBERTA HIGH SCHOOL OF FINE ARTS CERTIFICATE 

The Alberta High School of Fine Arts Certificate is awarded to those students who have received 30 or more credits (with at least 10 credits at the grade 12 level) in arts-related courses during their high school career. It signifies that a student has obtained a strong background in one of the three areas of specialization: Performing Arts, Visual Arts, or Technical Arts. A form of intent must be completed for this certificate to be awarded.


| Performing Arts | Technical Arts | Visual Arts |
| :--- | :--- | :--- |
| - Instrumental Music $10 / 20 / 30$ | - Technical Theatre $10 / 20 / 30$ | - Art $10 / 20 / 30$ |
| - Concert Band $10 / 20 / 30$ | - Design and Development | - Art History $11 / 21 / 31$ |
| - Vocal $10 / 20 / 30$ | - New Media $10 / 20 / 30$ | Design and Tech Graphic <br> $10 / 20 / 30$ |
| - Jazz Band $10 / 20 / 30$ |  | Design and Tech Video and <br> Sounds $10 / 20 / 30$ |
| - General Music $10 / 20 / 30$ |  | - New Media $10 / 20 / 30$ |
| - Musical Theatre $10 / 20 / 30$ |  | -Professional Studio Arts <br> $15 / 25 / 35$ |
| - Drama $10 / 20 / 30$ |  |  |
| - Advanced Acting $10 / 20 / 30$ |  |  |

## Additional Courses

With the support and permission of the Visual Arts teacher and Administrator, the following classes may also be considered towards an AHSFA Certificate, depending on the work created:

- Construction Technology 30
- Fabrication Technology 30

ELA Information

## ENGLISH LANGUAGE ARTS COURSES



English Language Arts (ELA) Program

## ELA Courses



- ELA 10-1
- ELA 10-1 AP
- ELA 10-2
- ELA 20-1
- ELA 20-1 AP
- ELA 20-2
- ELA 30-1
- ELA 30-1 AP
- ELA 30-2

5 credits each
( -4 courses are K\&E )

## ENGLISH LANGUAGE ARTS

## ENGLISH 10-1 (5 credits)

## Pre-requisite: $65 \%$ in Grade 9 Language Arts, Proficient/Excellent on PAT results and/or teacher recommendation along with a placement test that takes place in June.

- This is the first course of the -1 sequence and is a rigorous academic class. This course is designed for students who intend to pursue post-secondary studies at a university. Students are expected to refine and improve all language skills, focusing on critical and interpretative writing skills. This course offers a diverse collection of texts including booklength non-fiction, Canadian literature, essays, films, novels, modern plays, poetry, Shakespearean plays, short stories, and visual/multimedia texts.


## ENGLISH 10-1 AP (5 credits)

Pre-requisite: $\mathbf{7 5 \%}$ in Grade 9 Language Arts, Proficient/Excellent on PAT results and/or teacher recommendation along with a placement test that takes place in June.

- Students will study a variety of literary selections in a more challenging \& concentrated manner than in regular ELA 10-1. Students will be introduced to Critical Theories of Literature (Formalist, Archetypal), investigating allegorical literature, and exploring the universal notion of journeys (hero quest) over the semester. Students will be introduced to both styles of critical essays needed for each of their culminating examinations (AP \& 30-1).


## ENGLISH 10-2 ( 5 credits)

- This course is designed for students who intend to pursue entrance into post-secondary programs at colleges or technical institutes. The six strands of reading, writing, speaking, listening, viewing, and representing will be integrated throughout the course, with an emphasis placed on clear communication and improvement of the student's particular language needs and capacities. This course offers a diverse collection of texts including: book-length nonfiction, Canadian literature, essays, films, popular non-fiction, novels, modern plays, poetry, short stories, and visual/multimedia texts.


## ENGLISH 20-1 (5 credits)

## Recommended Prerequisite: $65 \%$ in English 10-1

- This course is designed for students who intend to pursue post-secondary studies at a university. Students are expected to refine and improve all language skills, focusing on critical and interpretative writing skills. This course offers a diverse collection of texts including: book-length non-fiction, Canadian literature, essays, films, novels, modern plays, poetry, Shakespearean plays, short stories, and visual/multimedia texts.


## ENGLISH 20-1 AP (5 credits)

## Recommended Prerequisite: 75\% in English 10-1 AP

- This continuation of the Pre-AP program explores increasingly complex texts. An even greater reading requirement and a further exploration of more advanced Critical Theory (Marxist, Psychoanalytical, and Deconstruction) will occur this year. With a strong emphasis on Critical/Analytical writing, this course is intended to prepare students for the university-level texts that will make up the backbone of literary focus next year. In an exploration of the notions of Utopia and Dystopia, students will travel from the Gardens of Eden to frightening visions of Brave New Worlds.


## ENGLISH 20-2 (5 credits)

## Prerequisite: 10-2

- This course is designed for students who intend to pursue entrance into post-secondary programs at colleges or technical institutes. The six strands of reading, writing, speaking, listening, viewing, and representing will be integrated throughout the course, with an emphasis placed on clear communication and improvement of the student's particular language needs and capacities. This course offers a diverse collection of texts including: booklength non-fiction, Canadian literature, essays, films, popular non-fiction, novels, modern plays, poetry, short stories, and visual/multimedia texts.

ENGLISH 30-1 (5 credits) -- Required for: Alberta High School Diploma --
Recommended Prerequisite: 65\% in English 20-1
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.

- This course is designed for students who intend to pursue post-secondary studies at a university. The six strands of reading, writing, speaking, listening, viewing, and representing will be integrated throughout the course, with an emphasis placed on literary analysis and critical evaluation. This course offers a diverse collection of texts including: book-length non-fiction, Canadian literature, essays, films, novels, modern plays, poetry, Shakespearean plays, short stories, and visual/multimedia texts.


## ENGLISH 30-1 AP (5 credits)

Recommended Prerequisite: 75\% in AP English 20-1
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.
Students can write their Internationally Recognized College Board Exam (Extra Fee)

- English 30-1 AP is the final course in the Advanced Placement Literature and Composition program. Culminating in both the 30-1 Diploma examination, and then (if the student chooses) the Advanced Placement Exam (fees apply). There is a strong Critical/Analytical writing focus, and students will be asked to read university-level literary texts. In an exploration of the notions of the Dream, students will explore an individual's quest for the ideal, exploring the fragile hope of the American Dream and even the Nightmares in Shelley's "Workshop of Filthy Creation."


## ENGLISH 30-2 (5 credits) -- Required for: Alberta High School Diploma --

Prerequisite: 20-1 or 20-2
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.

- This course is designed for students who intend to pursue entrance into post-secondary programs at colleges or technical institutes. This course offers a diverse collection of texts including: book-length non-fiction, Canadian literature, essays, films, popular non-fiction, novels, modern plays, poetry, short stories, and visual/multimedia texts.
- Note: Not all post-secondary institutions accept ELA 30-2 for entry.


## ENGLISH LANGUAGE ARTS 30-1 VS. 30-2

## English Language Arts 30-1

English 30-1 are required for:

- ALL UNIVERSITY PROGRAMS
- Even Sciences!



## English Language Arts 30-2

English 30-2 are accepted into all:

- Diploma/College Programs
- All colleges (SAIT, Red Deer College, Nait, Lethbridge college) accepts -2 English
- Colleges offer University transfer programs. That means, students start at a college, complete 2 years, then transfer to a university based on their college grades NOT their high school grades!
- University General or Open Studies
- You can apply to general or open studies programs and then transfer into an undergraduate degree program for your 3rd year...many of your 1st and 2nd year classes will count towards your 4-year degree!


## MATH Information MATHEMATICS COURSES

ÉCOLE SECONDAIRE FOOTHILLS COMPOSITE HIGH SCHOOL ALBERTA HIGH SCHOOL OF FINE ARTS



## Mathematics Program



## (Each course is 5 credits.)

[^1]
## Math Courses

Math 10 C Math 10C AP Math 10-2 Math 10-3
Math 10-4
Math 20-1
Math 20-1 AP
Math 20-2
Math 20-3
Math 20-4
Math 30-1
Math 30-1 AP

- Math 31
- Math 31 AP
- Math 30-2
- Math 30-3
(5 credits each)

Not all students have the same needs or goals. Now, in high school, students will be able to choose the mathematics courses that will help them on the path to their future. The new mathematics courses were developed together with the teachers who will be in the classrooms with you. They've been approved by instructors from colleges, technical institutions, and universities who'll be building on what you learn in high school. The material is based on input from business and industry leaders who use mathematics every day. The courses were created to meet the needs of students in high school and to support further education and career choices.

| COURSE |
| :---: | :---: | :---: |
| SEQUENCE |$\quad$| DESIGNED FOR: |
| :--- |$\quad$| INTENDED FOR: |
| :--- |

## MATHEMATICS

## MATH 10C (-1) (5 credits) <br> Prerequisite: Based on recommendations of previous teacher and performance on entrance exam. <br> Recommended: $65 \%$ in Grade 9 Mathematics

- Math 10C is the starting point for the -1 and -2 course sequences. The program is designed to provide students with mathematical understanding and critical thinking skills. Based on a problem-solving approach that incorporates the mathematical processes, developing a conceptual and procedural understanding of mathematics.
- The general outcomes in Mathematics 10C include:
- Develop spatial sense and proportional reasoning.
- Apply algebraic reasoning and numbers (rational and irrational), number patterns
- Develop graphical and algebraic reasoning through the study of relations.


## MATH 10C AP (5 credits)

## Prerequisite: $75 \%$ in Grade 9 Mathematics

Based on recommendations of previous teacher and performance on entrance exam.

- This course is designed for students who wish to write their Advanced Placement Exam in Grade 12. Students registering for the AP program should be highly motivated and have passion and an aptitude in mathematics. This course is designed to provide students with the mathematical understandings and critical thinking skills identified in the College Board's advanced placement program and for entry into postsecondary programs that require the study of calculus. The course covers all the objectives in Math 10C, as outlined by Alberta Learning, with some higher-level questioning and additional topics from higher-level math (Math 20-1). Need graphing calculator)


## MATH 10-3 (5 credits)

- The Mathematics 10-3 mathematics course is for students planning to enter a trade or the workforce upon completion of high school.
- The general outcomes in Mathematics 10-3 include developing:
- Spatial sense, Number Sense, Algebraic Reasoning, Critical Thinking Skills


## MATH 20-1 (5 credits)

## Prerequisite: 10C

Recommended: 65\% Math 10C
Required for Math 30-1 or 30-2

- This course is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into postsecondary programs that require the study of calculus.
- The general outcomes in Mathematics 20-1 include:
- Algebraic Reasoning, Number Sense, Trigonometric Reasoning, Algebraic and Graphical Reasoning through the Study of Relations.


## MATH 20-1 AP (5 credits)

## Prerequisite: Math 10C AP or Math 10C

Required for Math 30-1, Math 30-1 AP or 30-2

- Designed to provide students with the mathematical understandings and critical thinking skills identified in the College Board's advanced placement program and for entry into postsecondary programs that require the study of calculus.
- $\quad$ The general outcomes in Mathematics 20AP include:
- Algebraic reasoning and number sense.
- Trigonometric reasoning.
- Algebraic and graphical reasoning through the study of relations.
- Algebraic reasoning (Math 30-1).


## MATH 20-2 (5 credits)

Prerequisite: 10C
Required for Math 30-2 or 30-3

- Designed to provide students with the mathematical understandings and critical thinking skills identified for postsecondary studies in programs that do not require the study of calculus.
- The general outcomes in Mathematics 20-2 include:
- Spatial sense and proportional reasoning.
- Number sense and logical reasoning.
- Statistical reasoning.
- Algebraic and graphical reasoning through the study of relations.


## MATH 20-3 (5 credits)

Prerequisite: Math 10C or 10-3
Required for Math 30-3

- Designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into the majority of trades and for direct entry into the workforce.
- The general outcomes in Mathematics 20-3 include:
- Spatial sense through direct and indirect measurement.
- Number sense and critical thinking skills.
- Algebraic reasoning.
- Statistical reasoning.


## MATH 30-1 (5 credits)

Prerequisite: 20-1 (Required for Math 31 -corequisite)
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.

- Designed to provide students with the mathematical understandings and critical thinking skills identified for entry into postsecondary programs that require the study of calculus.
- The general outcomes in Mathematics 30-1 include:
- Trigonometric reasoning.
- Algebraic and graphical reasoning through the study of relations.
- Algebraic and numeric reasoning that involves combinatorics.


## MATH 30-1 AP (5 credits)

## Prerequisite: Math 20-1 AP

Required for Math 31AP
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.

- Designed to provide students with the mathematical understandings and critical thinking skills identified in the College Board's advanced placement program and for entry into postsecondary programs that require the study of calculus.
- The general outcomes in Mathematics 30AP include:
- Trigonometric reasoning.
- Algebraic and graphical reasoning through the study of relations.
- Algebraic and numeric reasoning that involves combinatorics.
- Limits (Math 31)


## MATH 30-2 (5 credits)

Prerequisite: 20-1 or 20-2

## Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.

- This course is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in programs that do not require the study of calculus.
- The general outcomes in Mathematics 30-2 include:
- Logical reasoning.
- Critical thinking skills related to uncertainty.
- Algebraic and graphical reasoning through the study of relations.
- Appreciation of the role of mathematics in society.


## MATH 30-3 (5 credits)

Prerequisite: 20-1 or 20-2 or 20-3

- This course is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into many trades and for direct entry into the workforce.
- The general outcomes in Mathematics 30-3 include:
- Spatial sense through direct and indirect measurement, Number sense and critical thinking skills. Critical thinking skills related to uncertainty, Algebraic reasoning and Statistical reasoning.


## Math 31 AP (5 credits)

Prerequisite: Math 30AP
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.
Students can write their Internationally Recognized College Board Exam (Extra Fee)

- This course is designed to prepare student for the College Boards Calculus $A B$ exam in May.
- Exam information can be found at www.collegeboard.org
- The general outcomes in Mathematics 31AP include:
- Limits, Continuity and Rates of Change, Derivatives and Applications of Derivatives. Curve Sketching and Functions, Differential Equations \& Definite Integrals


## Math 31 (5 credits)

Prerequisite: 20-1 and Corequisite Math 30-1 or Math 30-1 AP
Students will write an Alberta Education Diploma Exam valued at $30 \%$ of their final grade.

- This course is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into mathematical postsecondary programs such as engineering and sciences. The general outcomes in Mathematics 31 include:
- Limits and Rates of Change, Derivatives. Curve Sketching and Functions. Differential Equations and Integrals


## MATH 20 LEVELS EXPLAINED...

## MATH 20-I

Math 20-1 \& Math 30-1 are required for:

- All Math and Science programs
- Some Business Degrees


## MATH 20-2

## MATH 20-3

## Notes

Math 20-2 leads to
Math 30-2 which is a:

- University accepted course for all programs that do not have a specific Math 30-1 requirement

Math 20-3 is the stream if you passed Math 10-3 or Math 10C prep OR if you did not pass Math 10 C .

- It is acceptable into trades and...
- All college programs that do not have a specific math entrance requirement
- If your future program does not have a specific Math 30-1 requirement, you are MUCH BETTER to have a higher mark in Math 30-2!
- To be successful in Math 20-1, it is recommended to have an in-depth understanding of Math 10C.


## MATH 30 LEVELS EXPLAINED...

| MATH 30-I | MATH 30-2 | MATH 30-3 | MATH 3 I (Calculus) |
| :---: | :---: | :---: | :---: |
| Math 30-1 is required for all: <br> - Math and Science University programs <br> - As well as some Business degrees. <br> - Math 31 (CALC) is only required for engineering. | Math $\mathbf{3 0 - 2}$ is a: <br> - Is an Academic Math course that is accepted in many University Programs <br> - If not focused on going into a Science-based or Engineering program, Math 30-2 can be a great choice. | Math 30-3 is: <br> - The stream if you passed Math $30-3$ OR if you did not pass Math 20-1 or 20-2. <br> - It is acceptable into trades and all college programs that do not have a specific math entrance requirement | Math 31 is a: <br> - Demanding pre-calculus course <br> - Required for competitive university programs <br> - Where a minimum 80 per cent score is necessary |

# Social Studies Information SOCIAL STUDIES COURSES 



## SS Courses

## Social Studies Program



- SS 10-1
- SS 10-2
- SS 10-4
- SS 20-1
- SS 20-2
- SS 20-4
- SS 30-1
- SS 30-1
(5 credits each)


## SOCIAL STUDIES

## Social Studies 10-1 (5 Credits)

## Prerequisite: Grade 9 teacher recommendation

## Recommended: 65+\% in Grade 9 SS

- Students will critically examine the question, "Should we embrace globalization?"
- Students will study:
- the relationships between identity and citizenship to promote appreciation for citizenship in a globalizing world.
- the effects of globalization on people in Canada and throughout the world, including the impact on Aboriginal and Francophone communities.


## Social Studies 10-2 (5 Credits)

- Students will explore globalization as a philosophical phenomenon.
- Students will study:
- the relationship between identity and citizenship to appreciate the complexities of citizenship in a global community.
- the effects of globalization on people in Canada and other locations.


## Social Studies 20-1 (5 Credits)

## Prerequisite: SS 10-1

Recommended: 65+\% in SS 10-1

- Students will explore the complexities of nationalism in Canadian and international contexts.
- Students will study:
- the origins of nationalism, ultra-nationalism, supranationalism, and internationalism will contribute to student understandings of and appreciation for the issues inherent to competing views on nationalism.


## Social Studies 20-2 (5 Credits)

Prerequisite: SS 10-2

- Students will examine historical and contemporary understandings of nationalism in Canada and the world
- Students will explore:
- the origins of nationalism as well as the impacts of nationalism on individuals and communities in Canada and abroad.
- different understandings of nationalism and examine them from multiple perspectives.


## Social Studies 30-1 (5 Credits)

## Prerequisite: SS 20-1

Recommended: 65+\% in SS 20-1

- Students will explore the origins and complexities of ideologies to critically assess if they should be embraced and understand and appreciate the evolution of liberalism and liberal ideologies as well as those ideologies that reject liberalism.
- Students will analyze:
- Various political and economic systems so that they can assess the viability of the principles of liberalism.
- And develop an understanding of the roles and responsibilities associated with citizenship.


## Social Studies 30-2 (5 Credits) <br> Prerequisite: SS 20-2

- Students will examine the origins, values and components of competing ideologies and explore values associated with individualism and collectivism as foundations for ideologies.
- Students will examine:
- Various political and economic systems so that they can assess the viability of the principles of liberalism.
- And develop an understanding of the roles and responsibilities associated with citizenship.


# Science Information <br> SCIENCE COURSES 

ÉCOLE SECONDAIRE FOOTHILLS COMPOSITE HIGH SCHOOL ALBERTA HIGH SCHOOL OF FINE ARTS


Science Program


## Science Courses

- Science 10
- Science 14
- Science 20
- Science 24
- Science 30
- Biology 20
- Biology 30
- Physics 20
- Physics 30
- Chemistry 20
- Chemistry 30


## SCIENCES

## Science 10 (5 Credits)

## Prerequisite: Science 9

## Recommended Prerequisite: 65+\% in Grade 9 Science and teacher recommendation

 Required for: Science 20, Biology 20, Chemistry 30, Physics 20- This academic science program builds the knowledge skills and attitudes developed in the Grade 9 science curriculum. The units of study are Energy and Matter in Chemical Change (Chemistry), Energy Flow in Technological Systems (Physics), Cycling of Matter in Living Systems (Biology), and Energy Flow in Global Systems (Ecology).
** As Science 10 is a general science course, performance on individual units will help determine a student's selection of the 20-level sciences.


## Science 14 (5 Credits)

## Prerequisite: Science 9

## Required for: Science 24

- This is a general science program designed for students seeking to satisfy high school diploma science requirements. The units of study are Investigating the Properties of Matter (Chemistry), Energy Transfer Technologies (Chemistry and Physics), from Life to Lifestyle (Biology), and Matter and Energy in the Biosphere (Biology and Chemistry).


## Science 20 (5 Credits)

## Prerequisite: Science 10

- This is science course is an integrated, academic program that explores concepts of biology, chemistry, physics and earth sciences. It is designed for students enrolling in non-science fields at post-secondary institutions. The unites of study are Changing Earth, Changes in Living Systems, Chemical Changes and Changes in Motion.


## Science 24 ( 5 Credits)

## Prerequisite: Science 14

- This is a general science program designed for students seeking to satisfy high school diploma science requirements as part of their general education. The units of study are Applications of Matter and Chemical Change, understanding Common Energy Conversation Systems, Disease Defense and Human Health, Motion, Change and Transportation Safety.


## Science 30 (5 Credits)

## Prerequisite: Science 20, Biology 20, Chemistry 20 or Physics 20

- The units of study are how living systems respond to their environment, Chemistry in the Environment, Electromagnetic Energy, and Energy and the Environment. This is a Diploma Exam course and can be used by several post-secondary schools as an entrance requirement. Check with individual programs for that school's requirements.


## Biology 20 (5 Credits)

## Prerequisite: Science 10

## Recommended: 65+\% in Science 10 Biology Unit

- This course is an introduction to the study of life and the factors affecting it. The units of study are Matter and Energy Exchange in the Biosphere, Ecosystems and Population Change, Photosynthesis and Cellular Respiration, and Human Systems. The content and strategies of this program are designed for the student who will pursue further studies in a science-related field.


## Biology 30 (5 Credits)

## Prerequisite: Biology 20

## Recommended: 65+\% in Biology 20

- This is an advanced biology course intended for students who are interested in exploring biology and other sciences at the post-secondary level. The units of study are Nervous and Endocrine Systems, Reproduction and Development, Cell Division, Genetics and Molecular Biology, and Population and Community Dynamics.


## Chemistry 20 (5 Credits)

## Prerequisite: Science 10

## Recommended: 65+\% in Chemistry 10 Unit

- This course is an introduction to the study of chemistry. The basic goal is to show students how the fundamental principles of chemistry affect their day-to-day activities. The units of study are the Diversity of Matter and Chemical Bonding, Forms of Matter: gases, matter as solutions, acids and bases, and quantitative relationships in chemical changes. The content and strategies of this program are designed for the student who will pursue further studies in a science-related field.


## Chemistry 30 (5 Credits)

Prerequisite: Chemistry 20

## Recommended: 65+\% in Chemistry 20

- This is an advanced chemistry course intended for students who are interested in exploring Chemistry and other sciences at the post-secondary level. The units of study are Thermochemical Changes, Electrochemical Changes, Chemical Changes of Organic Compounds, and Chemical Equilibrium focusing on Acid-Base Systems.


## Physics 20 (5 Credits)

## Prerequisite: Science 10

Recommended: 65+\% in Physics 10 Unit

- This course is an introduction to the study of Physics. The topics studied are Kinematics, Dynamics, Energy Circular Motion, and Wave Properties.


## Physics 30 (5 Credits)

Prerequisite: Physics 20

## Recommended: 65+\% in Physics 20

- This is an advanced physics course intended for students who are interested in exploring physics and other sciences at the post-secondary level. The units of study are Momentum and Impulse, Forces and Fields, Electromagnetic Radiation, and Atomic Physics.


## SCIENCE EXPLAINED

## Chemistry 30

Chemistry 30 is required as a prerequisite for courses in:

- Biological Science
- Engineering
- Chemistry
- Geosciences
- Math \& Physics
- Nursing
- Animal Science
- Astronomy Programs
- basically anything to do with the Earth, human body, animals, and/or Math


## Biology 30

Biology 30 is required as a prerequisite for courses in:

- Biological Sciences
- Athletic Therapy
- Kinesiology
- Nursing
- basically anything to do with the Earth, human body, and/or animals

Physics 30 is recommended for all

- Biological Sciences
- Chemistry
- Engineering
- Geosciences
- Physics
- Astronomy Programs
- Applied Mathematics Major (must have at least Physics 20)


## Science 30

Science 30 can be used as a university entrance science for all:

- Non-science based Programs
- Some Nursing programs.


## SECOND LANGUAGES

## FRENCH IMMERSION PROGRAM

Bienvenue au programme d'immersion à l'école secondaire Foothills Composite. The French Immersion Program is for students who have completed grade nine French Immersion courses either in the Continuing Bilingual program or the late Immersion Program.

The required courses in French Immersion for $\mathbf{G r} .10$ study:

- French Language Arts 10-1: 5 credits
- French Social Studies 10-1: 5 credits

The required courses in French Immersion for Gr. 11 study:

- French Language Arts 20-1: 5 credits
- French Social Studies 20-1: 5 credits

The required courses in French Immersion for $\mathbf{G r} .12$ study:

- French Language Arts 30-1: 5 credits
- French Social Studies 30-1: 5 credits

Expectations of French Immersion Students (as in Foothills S.D. manual):

- Students are expected to speak in French in French Immersion classes.
- Students are expected to do all assigned work and ask for help when needed.
- French grammar is taught explicitly, and it is expected there is an effort to correct work to improve writing skills.
- Verbal presentations are also very important, and students are expected to make in-class verbal presentations.
** French Social Studies and French Language Arts will not be in the same semester, as both courses require a variety of verbal, written, and reading assignmentS.


## FRENCH

## FRENCH 10 (5 Credits)

## Prerequisite: None

- This is an introductory course in French as a Second Language designed for students who have never taken a course in French, or for those students who took French in previous school years.


## FRENCH 20 (5 Credits)

## Prerequisite: French 10

- This intermediate course is a continuation of the French 10 program based on the skills already acquired in French 10. This level continues to reinforce student speech and comprehension with greater emphasis on writing and reading skills. This is combined with knowledge of the fundamentals of French grammar and familiarity with French culture.


## FRENCH 30 (5 Credits)

## Prerequisite: French 20

- This 30-level French course continues to reinforce the skills of comprehension in conversations but increases the dimensions of reading and writing. This is combined with the knowledge of the fundamentals of French grammar and familiarity with French culture.


## SPANISH

## SPANISH 10 (5 Credits)

- This is an introductory engaging course, students will learn basic vocabulary and expressions. Using this knowledge, students will be able to participate in conversations and write fundamental paragraphs. Some areas of study include personal interests, family and friends, sports, food and travel.


## SPANISH 10 (5 Credits)

## Prerequisite: Spanish 10

- Students will improve their writing and speaking skills and will advance their comprehension of written and spoke Spanish. The past tense is introduced. Students will also develop a better understanding of Spanish Culture. Most lessons will be taught using Spanish as the language of instruction.


## SPANISH 30 (5 Credits)

## Prerequisite: Spanish 20

- This continuation of the Spanish 20 course will have an increased emphasis placed on reading, writing, listening and speaking skills. Different themes will be explored. Students will continue to learn more about the Spanish culture and most lessons will taught in Spanish.


## PHYSICAL EDUCATION (PE) 10 \& CALM Combined

## CALM (Career and Life Management) (3 Credits) - Alberta High School Graduation Diploma Requirement

- The goal of CALM is to enable students to make well-informed, considered decisions and choices in all aspects of their lives. Students will 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 and Financial Literacy at the senior high school level in Alberta.
- $\quad$ Students can earn two extra 30 Level Work Safety modules (HCS 3000\& 3010)


## Physical Education 10 (3 credits)

## Prerequisite: None

- This course is designed for students who want to complete Physical Education 10 in a less competitive environment focused more on healthy activity than sport.
- All grade 10 students will be enrolled in PE10/CALM combined.
- If both are taken in summer school before the start of grade 10, students will not be enrolled in PE10/CALM.
- Students will achieve 3 PE credits and 3 CALM credits
- CALM and PE 10 are required of all senior high students, as their completion is mandatory to qualify for an Alberta High School Diploma


## PHYSICAL EDUCATION (PE) 20 and 30

## Physical Education 20 / 30 (5 credits)

## Prerequisites: Grade PE 10 is required for PE 20 and PE 20 is required for PE 30

- This course is designed to enable students to develop the knowledge, skills, and attitudes necessary to lead an active and healthy lifestyle. Emphasis will be placed on the attitude, effort, participation, and leadership components of the course. Skill and knowledge will be assessed through active involvement in a lower-competitive environment.
- Skills/Activities that may be included in this course:
- Badminton/ Dance
- Low Organized Games
- Archery/Mountain Biking
- Basketball/Nutrition - Wall Climbing
- Gymnastics/Broomball
- Bowling/C.P.R. - Cross-Country Skiing
- Racquetball / Squash
- Curling/Skating
- Swimming - Pickleball
- Fitness /Billiards
- Volleyball/Lacrosse
- Spike all
**NOTE: Gym Strip: Available for purchase. Off-campus activities \& transportation will be optional, and students will only be charged for those extra activities in which they participate.


## SPORT SCIENCE

## Sports Science 10 (5 credits)

- Sports science consists of the necessary components to develop, achieve, and maintain a healthy lifestyle. The focus is on wellness, sport, nutrition, injury prevention/management and training for athletic competition. There is a strong emphasis in some modules on anatomy, physiology, and pathology which advance at every level.


## Sports Science 20, (5 credits)

## Prerequisite: Sports Science 10

- Sports science consists of the necessary components to develop, achieve, and maintain a healthy lifestyle. The focus is on wellness, sport, nutrition, injury prevention/management and training for athletic competition. There is a strong emphasis in some modules on anatomy, physiology, and pathology which advance at every level.


## Sports Science 30 (5 credits)

## Prerequisite: Sports Science 20

- Sports science consists of the necessary components to develop, achieve, and maintain a healthy lifestyle. The focus is on wellness, sport, nutrition, injury prevention/management and training for athletic competition. There is a strong emphasis in some modules on anatomy, physiology, and pathology which advance at every level.

[^2]
## SPORTS PERFORMANCE

## SPORTS PERFORMANCE 10 (5 credits) <br> Prerequisite: None

- This course is designed for students who want to gain a foundational understanding of training methods, team and individual leadership, wellness and sports psychology. Students will develop skills and attributes for safe training practices and a deeper understanding of training and conditioning for athletes.


## SPORTS PERFORMANCE 20 (5 credits)

## Prerequisite: Sports Performance 10

- This course is designed for students who want to explore the science behind athletic excellence. Whether a student is an aspiring athlete, a fitness enthusiast, or simply interested in optimizing physical performance, this course provides the foundational understanding of training methods, team and individual leadership, nutrition and wellness of sports psychology.


## SPORTS PERFORMANCE 30 (5 credits)

## Prerequisite: Sports Performance 20

- This course is designed for students who want to continue exploring and striving for athletic excellence and knowledge in personalizing their workout programs. Students will incorporate theory, reflection, and the assessment of their personal goals continuously. Exposure to advanced sports psychology skills and an understanding of the impacts of sports and athletics on society will be included.


## FORENSIC Studies And Social Sciences

## PSYCHOLOGY AND SOCIOLOGY

## EXPERIMENTAL PSYCHOLOGY 30 and SOCIOLOGY 30 ( 6 credits)

## Prerequisite: None (restricted to grade 11 and 12 students)

- This course provides an opportunity to deepen understanding of human behaviour and appreciate more fully the reasons why individuals and groups act in the way that they do. From this study, it is hoped that learners develop skills and attitudes to live more effectively in today's complex world.


## FORENSICS AND LAW

## FORENSICS and LAW 25 / 35 ( 6 credits)

Prerequisite: Science 10 or 14 (restricted to grade 11 and 12 students)

- Learning in this course will start with acquiring and extending knowledge of basic scientific concepts, which will then be applied to realistic scenarios related to law. Students will engage in hands-on forensic laboratory activities, internet research case study examples and an introductory level. This course offers students the opportunity to learn basic and practical information about the law, how it impacts daily life, and how students can participate in its evolution.


## INDIGENOUS STUDIES

## INDIGENOUS STUDIES 10/ 20/ 30 ( 5 credits each)

## Prerequisite: credits follow in progression starting at the 10-level

- Indigenous Studies is not just a course, it is an invitation to explore, appreciate and celebrate the richness of Indigenous cultures. By integrating Indigenous perspectives into education, the goal is to contribute to a more inclusive and compassionate society.


## CAREER AND TECHNOLOGY STUDIES (CTS)

FCHS/AHSFA provides a diverse range of Career and Technology Studies (CTS) programs. The (CTS) program is designed to develop skills that senior high school students can apply in their daily lives when preparing for entry into the workplace or further learning opportunities. CTS enables students to develop the confidence they need as they move into adult roles by allowing them to assume increased responsibility for their learning; cultivate their talents, interests, and abilities; and define and act on their goals.

Certain courses have prerequisites for upholding safety standards, following the instructional sequence, and aligning with post-secondary programs.

- A course (module) defines what a student is expected to know and be able to do. One course module completed equals one credit (approximately equivalent to 25 hours of instruction).
- The passing mark for each module is $50 \%$.
- Course modules are organized into three levels - introductory ( 1000 's), intermediate ( 2000 's) and advanced (3000's).
- Specific course modules are prerequisites for other course modules within and across the three levels.


## COSMETOLOGY

## Cosmetology Program and Credits:

- This CTS program is designed to develop skills that senior high school students can apply in their daily lives when preparing for entry into the workplace or further learning opportunities. Students will build self-confidence and ultimately enhance their self-image. It is important to note that all modules are 30 -level.
- Each course level $=5$ modules $=5$ credits.
- Students are required to pass all 5 modules to advance to the next level.


## Cosmetology 1 (COSMO1) (5 credits)

- This introductory course emphasizes personal and professional practices, apprenticeship safety, learning how to perform a professional shampoo service \& styling hair using a variety of hot tools. Each student will learn about the importance of all aspects of professionalism and build communication skills all while having fun exploring the salon setting.


## Cosmetology 2A (COSMO2) (5 credits) <br> Prerequisites: COSMO1

- This intermediate course focuses on fundamental concepts in cosmetology adding to student's previous skills from COSMOI. Students will continue to advance their knowledge about hair and scalp care, styling hair (long and short) updo styles and learn the basics of perming.


## Cosmetology 2B \& 2C (COS 20) (9 credits) - ½ DAY/Semester

Prerequisites: COSMO2

- This senior course focuses on fundamental concepts of perming, haircutting, and hair colouring (colour and highlightening applications).


## Cosmetology 3AB \& 3CD (COS 30) (8-10 credits per level/semester). - ½ Day/Semester Prerequisites: COSMO2

- At this senior level, students are deepening their knowledge and refining their skills. Students at this level are committed and passionate about cosmetology as a possible career path. Students will be expected to provide hair services to the public and will focus on various skill development in the areas of haircutting, hair colouring \& perming to name a few.


## CULINARY ARTS (FOODS)

The FCHS Culinary Arts Program allows students to prepare food in a professional kitchen setting. Students develop an appreciation for the nature of food, nutrition and health, management, safety, sanitation and equipment, preparation of food, presentation and service, consumerism/food selection, multicultural aspects of food and food ecology.
** At every level, food prepared by students will be sold in our full-service cafeteria and students will be expected to be placed on a schedule to work some lunch hours.

## Foods 10 (5 credits)

- Introduction to Foods provides students with the opportunity to prepare food in an industrial kitchen setting and explore the fundamentals of professional cooking. Foods focuses on combining theory and hands-on learning. At the introductory level, students will be able to fully demonstrate proper safety and sanitation, have a basic understanding of kitchen math, and know how to utilize kitchen equipment.


## Foods 20 (5 credits)

## Prerequisite: Foods 10

- This intermediate food course builds upon basic skills and knowledge of cooking and provides a comprehensive exploration of cooking skills. Students will focus on working on the production line to prepare recipes in the professional environment for the cafeteria and school community. Recipes prepared will focus on various cold foods, soups and sauces, meat products, as well as cake and pastries.


## Foods 30 (5 credits)

## Prerequisite: Foods 10 - Recommended Foods 20

- This This senior-level food course builds upon basic skills and knowledge that may lead to a career in culinary. Students will focus on working on the production line to prepare recipes in the professional environment for the cafeteria and school community. Recipes prepared will focus on foods for various life stages, international cuisine, advanced soups and sauces, advanced meat cookery, and yeast products.


## BUSINESS EDUCATION

## Business 10 (5 credits)

- In this interactive introductory course, students will be introduced to the finances of business. Students will learn the fundamental concepts required to effectively understand the business environment and to make critical business decisions. They will use accounting practices and terminology unique to financial accounting. Students will become familiar with the accounting cycle, record business transactions, prepare financial statements and apply specialized accounting procedures. There is also a personal finance portion to this class, including an introduction to budget and taxes.


## Business 20 (5 credits)

## Recommended Prerequisite: Business 10

- This engaging intermediate course focuses on practical applications of business concepts and will involve a project management approach. Students will gather and analyze data to make informed decisions about feasible business ventures. They will be exposed to the creation, management, and marketing of a business. The use of technology will be integrated into this course.


## Business 30 ( 5 credits)

## Recommended Prerequisite: Business 20

- This advanced business class will challenge students to apply their previous business knowledge to specific business tasks. It will involve a strong practical component. The course will focus on business operations and promotions. The ability to be self-motivated and to work independently are attributes that are fundamental for this course.


## NEW MEDIA (GRAPHIC \& VIDEO/SOUND)

## New Media 10 (5 credits)

- Students will learn how to edit videos, work with sophisticated camera equipment, and create digital art in Canada's most high-tech high-school lab! Appeals to students who have an interest in making videos and social media platforms using Adobe Premiere. Students will be engaged with creating digital artwork using Photoshop and Illustrator. Students will also be studying photography and digital creation.


## New Media 20 and 30 Graphic Design (5 credits)

## Prerequisite: New Media 10

- Graphic Design is introduced in grade 10 New Media and then expands in grade 11 and 12 , focusing on digital layouts, raster and vector graphics, and photography. Mr. Stevens, with over two decades of professional digital design and photography experience, leads the curriculum. Students create digital and printed work for their evolving graduate portfolios, meeting Alberta Education's requirements. The course covers pixel artwork exploration, environmental raster tile set design, basic walk cycles for original raster characters, and more. Students tackle 15 Milestones, working on diverse projects involving tools, themes, and creativity. The Adobe suite of professional tools is used for poster creation, CV layouts, book and album cover design, animation, portrait photography, vector logos, isometric artwork, branding, and compositing. Exceptional students can compete in Skills Canada competitions.


## New Media 20 and 30 Video Production ( 5 credits) Prerequisite: New Media 10 \& 20

- Video Production 20/30 is a nationally acclaimed course that commences with exploratory work in grade 10 New Media. It then diverges into specialized studies during grades 11 and 12 , focusing on short films, the school television show, and participation in Skills Canada. Led by Mr. Stevens, who boasts over two decades of professional production experience (including signatory roles in productions screened from New York City to Berlin), the curriculum equips students with skills in lighting, location audio recording, camera operation, and screenwriting. The course follows a modular structure, guiding students through a series of Milestones as they tackle diverse projects involving various tools, themes, and creative approaches. Exceptional students even get the chance to compete in Skills Canada competitions!


## VIDEO GAME DESIGN

## Video Game Design 10 (5-6 credits)

- Students will learn how to create their own video games in Canada's most high-tech high school lab! This course is for students who love/have an interest in creating digital artwork for video games using Adobe Photoshop and lllustrator. Students who have a passion and interest in programming will learn how to work in the Unity 3D Game Engine. This first video game technology savvy course leads directly to post-secondary programs in Video Game Design. It also includes an introduction to programming with C\# and grants both CSE and COM credits permitting access to all Computer Science and New Media intermediate/senior streams.


## Video Game Design 20/30 (5-6 credits)

## Prerequisite: New Media 10

- This senior level of video game design is for students continuing their interest in pursuing intermediate and advanced studies in video game design (programming and artwork). This course also continues to prepare students for a post-secondary track in game development.
** Note: Students taking intermediate/senior graphic design, film production or design and development could result in earning fewer than five credits in coordination with other CTS programs may be required.


## ROBOTICS

## Robotics 10 ( 5 credits)

- Discover the exciting world of robotics in this course, where students delve into coding, building robots, and mastering circuits and sensors. From interpreting circuit diagrams to soldering techniques, students learn hands-on skills to bring their creations to life. Culminating in thrilling robotic challenges, this course ignites a passion for future exploration, whether in repairing technology or crafting innovative designs. It's a journey of discovery and creativity, laying the groundwork for limitless possibilities.


## Robotics 20 ( 5 credits)

Prerequisite: credits follow in progression starting at the 10 -level in Robotics 10

- In this advanced course, students expand their knowledge of sensors and robotics, tackling complex challenges in a hands-on environment. Through practical exercises and experimentation, they delve into the circuit board process, from sketching to breadboard testing to PCB layout and planning. With opportunities to design custom components, students hone their skills while thinking about their preferred focus, whether hardware or circuitry. It's a dynamic journey of discovery, paving the way for specialized interests and future innovation.


## Robotics 30 ( 5 credits)

Prerequisite: credits follow in progression starting at the 10 -level and into Robotics 20

- In this advanced course, students delve deeper into sensor functionality while exploring diverse topics such as musical amps. Students will tackle advanced robotics concepts, including intricate drivetrains like omni and mecanum wheels.
- Experimenting with RF, Bluetooth and GPS, students venture into wireless control possibilities. With the freedom to pursue their interests, students will design and execute personalized projects, bringing their innovative ideas to life.


# DESIGN AND DEVELOPMENT <br> (Architecture, CAD, Animation \& Computer Science) 

## Design and Development 10 (5 credits)

- In this introductory course, students will journey through Architecture, Mechanical CAD, 2D and 3D Drawing, and Computer Science to allow students to sample a wide variety of modules that have complementary skill sets. Students will expand on this knowledge, exploring digital drawings of fantasy maps, designing and rendering 3D houses from 2D-floor plans, and building the necessary CAD skills to be able to build and reproduce 3D objects destined for a 3D printer. This course helps students determine which specialization they would prefer to explore at the intermediate level.


## Design and Development 20 ( 5 credits) <br> Prerequisite: Design and Development 10

** Students often choose a specialization (Architecture, Mechanical CAD, or 2D/3D Animation) at this point in the program.

- The Architecture program caters to students passionate about Architecture or Interior Design. Students will delve into using tools like Revit to create and construct their own custom houses. Additionally, they take on the BILD challenge, designing a house for a small town in the Rockies. Students also learn effective techniques for rendering and presenting their work. The level of detail achieved allows for 3D printing of specific parts, which can then be incorporated into a scale model of their house.
- Mechanical CAD is the perfect choice for students aiming to specialize in CAD, Engineering, or Product Design. In this course, they delve into more advanced features like joints and assemblies. These students often find themselves recreating, modifying, or redesigning parts needed in mechanics, woodshops, or other contexts. The level of detail they achieve allows for digital exploration via Augmented Reality or even reproduction as scale models using 3D printers. It's also an excellent option for those combining it with woodshop or welding, especially if they have an interest in CNC design.
- The 2D/3D Animation course caters to students passionate about digital drawing and animation. In this specialization, students can focus on either 2D or 3D Drawing and Animation. They build upon their existing understanding to enhance their skills, preparing them to create a portfolio and present their work when needed. Students have the flexibility to use tools like Krita (for 2D) or Blender (for 3D). Some even choose to work with their familiar programs and technology, leveraging their custom setups.
- Computer Science introduces students to the essential components of any program via an exploration of Python. Students will learn how to handle loops, conditional statements, methods, and other aspects of any programming language. As students progress through data structures, they will learn about 1D and 2D arrays, including dictionaries. Computer Science includes an investigation of the surrounding concepts that exist, including the ethics, number systems, and hardware of computers.


## Design and Development 30 ( 5 credits)

## Prerequisite: Design and Development 20 specific specialization

** As students progress to this advanced level, specialization in a stream of interest is expected.

- Architecture is for students who are interested in Architecture and/or Interior Design. Students further build on their knowledge and aim for a quality of work that would attract/retain clients. Students will explore how to render their work via Twin Motion and other art styles; and how to set up a presentation board to show off their skills. Student-built scale models will incorporate 3D components and hopefully simply lighting.
- Mechanical CADD is for students who are interested in CAD, Engineering, and/or Product Design. Students are often asked to recreate and improve the design of existing parts for a client based on design, load, stress, or other factors. The expected level of detail will be enough to have these projects digitally explored via Augmented Reality or be reproduced as a scale model using a 3D printer. This is also a great course for those who are combining it with woodshop or welding and have an interest in CNC design.
- 2D/3D Animation is for students who are interested in Architecture and/or Interior Design. Students further build on their knowledge and aim for a quality of work that would attract/retain clients. Students at this level will build on their understanding to achieve a level that will help them compete in competitive environments.
- The Computer Science Stream at this level will build on each student's skills in coding by introducing students to specialized algorithms and object-oriented programming that they can in turn build on to explore areas of interest. At this point, students will either want to deepen their understanding of one language or will want to learn about multiple languages. It is encouraged that students come with a plan and a goal in mind so that those interests can be supported throughout the term.


## Construction Technology 10 ( 5 credits)

- This course is for students who have an interest in woodworking. By becoming orientated within the wood shop expectations and cultures, students will gain knowledge and skills in general tool and shop safety along with basic beginner joinery and woodworking processes. Students will also learn to plan and estimate time and materials to construct a series of beginner woodworking projects safely and properly. This engaging hands-on course is the ticket to the exciting realm of sawdust and creativity.


## Construction Technology 20 ( 5 credits)

## Prerequisite: Construction Technology 10

${ }^{* *}$ Students select from Set A (Cabinet Making), Set B (Carpentry), or a combination. Students can take A and B in the same year.

- Set A Cabinet Making: This course is for students who have an interest in cabinetmaking, furniture design and construction, woodturning and general woodwork. Students gain integral knowledge of shop safety, tools, and procedures. Students will learn to design, plan, estimate, properly sequence, and construct an intermediate woodwork project.
- Set B Carpentry: This course is designed to give the student a basic understanding of carpentry fundamentals. The student will study the correct use of tools and machines, site processes, safety, framing and roofing procedures, exterior finishing techniques, measurement, and shop mathematics. Carpentry skills will be developed as the projects are completed.


## Construction Technology 30 ( 5 credits)

Prerequisite: Construction Technology 20 and the appropriate intermediate courses.
** Students select from Set A (Cabinet Making), Set B (Carpentry), or a combination. Students can take A and B in the same year.

- Set A Cabinet Making: This course is for students who have an interest in cabinetmaking, furniture design, and advanced woodwork. The student will review the correct use of tools and machines, shop processes, safety, joinery, and measurement. Learners will also look at tool care and maintenance, web frame construction, veneering, and leg and rail construction. Students will learn to design, plan, estimate, properly sequence, and construct an advanced woodwork project.
- Set B Carpentry: For students who have an interest in carpentry practices and procedures. Students gain integral knowledge of shop/site safety, tools, and procedures. Students will learn to estimate, plan, properly sequence, and complete a carpentry project.


## MECHANICS

## Mechanics 10 ( 5 credits)

- This course is designed to increase a student's familiarity with automotive maintenance, tool use and robotics systems. Students will learn to program Arduino, prototype direct control robotics systems, work with hand tools, perform safety inspections on vehicles and develop an understanding of basic circuits, motors and forms of alternate energy. This course will prepare students for a successful transition into higher-level Automotive and Robotics coursework and future employment by emphasizing the knowledge, skills and attitudes required.


## Mechanics 20 ( 5 credits)

## Prerequisite: Mechanics 10

- This senior mechanics strand offers students hands-on experience, knowledge and skills related to the design and maintenance of transportation vehicles and the impact they have on the environment and the economy. Course content includes diagnosis and repair of vehicle systems (tires, wheels, bearings, brake systems, steering/suspension systems, lubrication/cooling, and recommended vehicle maintenance procedures.) Proper tightening specification and date research will be covered.


## Mechanics 30 ( 5 credits)

## Prerequisite: Mechanics 20

- This senior mechanics course includes engine tune-up, analysis and repair, engine overhaul procedures, and starting/charging systems, emission controls, ignition system diagnosis and repair, and wheel alignment.


## Fabrication 10 ( 5 credits)

- In this introductory level course, students will learn safety, tool use and process at the basic level as they build various projects. Some modules may include: Basic Electric Welding, Oxyacetylene Welding, Semi-Automated Welding (Mig \& Flux core welding) and Bar and Tubular Fabrication projects. The underlying emphasis through the three years is learning to work with both hands simultaneously, a skill that transfers to many fields!


## Fabrication 20 ( 5 credits)

Prerequisite: Fabrication 10

- In this intermediate welding course, students will learn fabrication techniques at the intermediate level as they take more control over tools in the shop setting. Projects become more complicated as students work more independently. Topics will include: Oxyfuel Welding, Stick Welding, Gas Metal Arc Welding (mig welding), Flux Core Arc Welding, Custom Fabrication (project design and fabrication), Thermal Cutting (Plasma and Oxyfuel) and CNC Plasma Cutting


## Fabrication 30 (5 credits)

## Prerequisite: Fabrication 20

- In this senior welding course, students will learn advanced techniques and primarily work independently on individual fabrication projects. Topics will include Arc Welding 3, Arc Welding 4, Gas Metal Arc Welding 2, Flux Core Arc Welding 2, Custom Fabrication (projects), Gas Tungsten Arc Welding (TIG), CNC Plasma Cutting and Aluminum Welding.


## PLUMBING AND ELECTRICAL

## Plumbing (3 credits)

## Prerequisite: Mechanics 10 or Robotics 10 - Course is for grade 11 and 12 students only.

- This CTS course is an introduction to the HVAC/Plumbing/Pipefitting trades. This course will involve modules involved in the building trades as experienced by a Journeyman. This class will focus on the fundamental knowledge and skills necessary to be successful in the mechanical systems trades. Students will develop knowledge and skills in the correct use of tools, machines, safety and shop culture. This course will provide students with the knowledge, skills, and attitudes for employment or further education. This course will engage students in learning opportunities to discover their interests in practical and purposeful ways.


## Electrical Systems (3 credits)

Prerequisite: Mechanics 10 or Robotics 10 - Course is for grade 11 and 12 students only.

- This CTS course is an introduction to the electrical trade. It will involve modules involved in the building trades as experienced by a Journeyman Electrician. This class will focus on the fundamental knowledge and skills necessary to be successful in the electrical trade. Students will develop knowledge and skills in the correct use of tools, machines, safety and shop culture. This course will provide students with the knowledge, skills, and attitudes for employment or further education. This course will engage students in learning opportunities to discover their interests in practical and purposeful ways.


## OUTDOOR EDUCATION

BACKGROUND INFO: Our Outdoor Education Program has multiple hands-on projects! (Leather work, sewing, cooking on stoves, food preservation, knife use, fire craft, knot tying, shelter building, traps \& snares, biking, ski maintenance, bike maintenance, rocket stoves, hand sewing, navigation, compass use, orienteering, wood carving and much more). Students who thrive in an environment that have a constant change of activities will love this course!

## Outdoor Education 10 (5 credits)

- The goal of the CTS courses in the Outdoor Education (Level 1) program are to provide students with a foundation for the safe participation in outdoor activities in western Canada. The skills, knowledge and certifications obtained in these courses will help students succeed in a variety of career paths in the outdoor industry such as a recreational leader or hiking guide. The following modules will be covered: Wilderness Navigation, Outdoor Cooking, Boat Safety, Sewing Fundamentals, Creating Accessories (Leather Work) and Dehydrating and Preparing a backpacking meal.


## Outdoor Education 20 \& 30 (5 credits)

Recommended prerequisite: Outdoor $10 \& 20$ (NONE required for Outdoor Ed $20 \& 30$ - students can still enroll without 10 or 20 level

- Outdoor Education 20/30 is a CTS student-centered program designed to enhance the participant's learning ability, self-confidence, and self-discipline. The Outdoor Education 20/30 course challenges individuals mentally, physically, socially, emotionally, and culturally. Students will develop knowledge, skills and abilities in outdoor activities through theory, project-based learning, labs and application in the field. There will be day hikes, camping and backpacking involved in this course. Modules include: Bowhunting Education, Angling \& Fish Management, Cooking Practice, Survival and Navigational Skills, and examining Management of Wildlife.


## AVIATION

## Aviation 15 (5 credits)

- At the end of the Aviation 15 course, students should have the required ground school training and be prepared to write the Transport Canada Exam for either gliding or a recreational pilot licence (min. age requirement 16 years). Students will also be able to write and perform the oral exam for a Restricted Radio Operator Licence - Aeronautical. Both tests will be arranged with the government agency and completed outside of school. The flight training and inair test will be arranged by the student with an accredited flight training school.


## Aviation 25 (5 credits)

## Prerequisite: Aviation 15

- Students will continue to focus on foundational skills taught in Aviation 15. Students will gain an understanding of air law and procedures, meteorology, navigation and communication. Students should have the required ground school training and be prepared to write the Transport Canada Private Pilot Licence written test at the end of the Aviation 25 course.


## FINE ARTS

## ART

## ART 10 ( 5 credits)

- Art 10 enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials and processes for artistic exploration and experimentation. Students will apply the elements and principles of design when exploring the creative process. Students will use critical analysis to reflect on and interpret art within a personal, contemporary, and historical context. This course includes activities in drawing, painting, mixed media, printmaking and sculpture, elements and principles of design, colour theory and art analysis.


## Art 20 (5 credits)

Prerequisite Art 10

- Art 20 enables students further to develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, printmaking, and mixed media works. Students will use the critical analysis process when evaluating their work and the work of others. Art history and theory are components that run throughout the course.


## Art 30 (5 credits)

## Prerequisite: Art 20

- The development of a personal style is the major focus of Art 30. This course may include activities in drawing, painting, mixed media, printmaking and sculpture, elements and principles of design, colour theory, art history and art analysis. There is an additional independent study unit, which allows students to plan and execute a self-directed art project, using a medium of their choice.


## Portfolio Art 35 (5 credits)

Prerequisite: $\mathbf{7 5 \%}$ in Art 30 and teacher recommendation (only available to Grade 12 students)

- Students will focus on creating a portfolio of pieces to demonstrate inquiry through art and design and the development of materials, processes, and ideas over a semester. Portfolios include works of art and design, process documentation, and written information about the work presented.


## Art History 11, 21, and 31 ( 5 credits each)

## Prerequisite: Previous Art History Level

- Art History at each level encourages students to study, apply and be engaged in the origins of art and cultural influences while developing a growing repertoire of visual skills and techniques. Students will also learn about artistic eras, the impact of international influences, modern technology on modern art, and post-modern art through the study of contemporary artworks and movements.


## Drama 10 (5 credits)

- Drama 10 is the foundational course for drama at the high school level. Students will be challenged to foster a positive self-concept by encouragement to explore life through the assumption of roles as they develop their skills and take positive risks in a setting that encourages teamwork and cultivates confidence.


## Drama 20 (5 credits)

Prerequisite: Drama 10

- Drama 20 will invite students to delve deeper into the study of voice, movement, improvisation, theatre history and technical theatre. Students will also explore the art of script writing, story creation, acting and the development of characterization skills. Drama 20 involved writing, casting, and directing small performances. is the foundational course for drama at the high school level. Students will be challenged to do their best as they develop their skills and take positive risks in a setting that encourages teamwork and cultivates confidence.


## Drama 30 (5 credits)

Prerequisite: Drama 20

- Drama 30, students will become producers, directors, actors, and scene designers. Students will make further connections with the professional theatre community and learn about the various employment opportunities in the dramatic arts. Students will reflect on and participate in the various creative stages of production. There will be substantial collaboration with peers through dramatic exploration.


## Advanced Acting 15 / 25 / 35 (5 credits)

## Prerequisite: Must have previous level completed to move to next level.

This class is OUTSIDE of the tameable: after school.

- Students will have the opportunity to put into practice the performance and production skills learned in previous dram classes. Students are going to put on a show! Students will combine the skills of the course to develop mini-plays that they will perform. This is a performance-based course that provides a continuum of theatre experiences that move well beyond the introductory and exploratory acting initiatives outlined in Drama 10/20/30.


## MUSCIAL THEATRE

## Musical Theatre 15 / 25 / 35 (5 credits)

## Prerequisite: Must have previous level completed to move to the next level (ie. Musical Theatre 15 for Musical Theatre 25)

 Audition Based- Musical Theatre provides students with the integrated study of drama, vocal music, and dance. Students will have the opportunity to develop skills in dramatic storytelling using singing, dancing, and acting while collaborating as an ensemble in a musical production. Students will participate in an experience that reflects the professional discipline while improving skills in vocal technique, choreography, character development, professionalism, and creative collaboration.
** Students will be required to attend ALL evening and weekend performances, as well as scheduled after-school rehearsals and weekend dress rehearsals.


## TECHNICAL THEATRE

## Technical Theatre 15/25/35 (5 credits)

Prerequisite: Must have the previous level completed to move to the next level (ie. Technical Theatre 15 for Technical Theatre 25)

- Students will study all aspects of technical theatre from a design perspective and practical application. Students will have the opportunity to engage in stage management and technical design, including lighting, sound, set design, prop construction, costume design, stage make-up, and safety training. This course intends to provide a technical experience that will encourage students to develop their creative, intuitive, spontaneous and imaginative potential. Technical Theatre students will collaborate with the Musical Theatre program members, to assist in producing the AHSFA musical production.


## ** Students will be required to attend ALL evening and weekend performances, as well as scheduled after-school rehearsals and weekend dress rehearsals.

## DANCE

## Dance 15 / 25 (5 credits)

Prerequisite: Must have the previous level completed to move to the next level (ie. Dance 15 for Dance 25)

- Dance is offered for students who are interested in the areas of awareness and mastery of movement, expression, technique and choreography. Dance allows students to focus on individual improvement in technique, strength, flexibility and style. Students will have the opportunity to perform in various dance styles and to demonstrate leadership skills in creating choreography and in self-directed ensembles.


## INSTRUMENTAL MUSIC (BAND)

## Instrumental Music 10/20/30 (5 credits)

Prerequisite: Junior High Band or proven musical proficiency. Must also have the previous level completed to move to the next level (ie. Instrumental Music 10 for Instrumental Music 20)

- Instrumental Music is a continuation of Junior High Band. This class runs for the entire school year, with rehearsals taking place every second day. This is a comprehensive music course designed to equip students with a diverse array of skills essential for musical proficiency and artistic growth while collaborating with others. Moreover, the course fosters self-expression, creativity, and effective communication through the medium of music, encouraging students to explore their unique artistic voices. Instrumental students have the opportunity to take part in day, multi-day trips, camps and competitions.


## CONCERT BAND

## Concert Band 10/20/30 (5 credits)

** Enrollment is done after each semester begins (not available to choose in course selections)
Audition and Invitation Based (Outside of timetable- Lunch Time)
Prerequisite: Must be enrolled in Instrumental Music. Previous level must be awarded to move up in levels.

- Concert Band is an amazing enrichment opportunity for students who excel in music. There will be performance opportunities (day \& evening), instrument workshops, music festivals and tours. This course is audition based.


## JAZZ BAND

Jazz Band 15 /25/ 35

## Prerequisites: Previous level required to move up (Audition based)

- Jazz Band classes at AHSFA are an extension of Instrumental Music 10/20/30. Students must be in Instrumental Music to be in an AHSFA Jazz Band as it is an extension. Part of the performance expectations includes involvement in concerts (daytime and evening), instrument workshops, music festivals, and potentially recording sessions and tours. The Jazz band is one of the most elite groups of musicians in the school. Students will learn and perform a repertoire that contains a variety of jazz styles. Concepts required for jazz improvisation and melodic development will also be taught. For students looking for an extra challenge or a space to be very creative then Jazz is for them!


## GENERAL MUSIC

## General Music 10 / 20 /30

## Prerequisite: Each course needs the previous level completed

- This engaging, self-directed course is open to ANY student who wants to learn more about music. Experience may vary from beginner to advanced on guitar/ukulele or any instrument students already have experience on. (piano, wind instruments, voice, drums etc!) Students will develop an understanding of the elements and structures of music as they apply to performance and listening. Modules and Units will include: The History of Rock, composition and song writing, music and technology, world music, careers in music, jazz or popular music.


## VOCAL ENSEMBLE

## Vocal Ensemble 15 /25/ 35

## AUDITION BASED

## Prerequisites: Previous level required to move up

- A treble (SSA or SSAA) choir for advanced singers focusing on vocal performance with an emphasis on choral or group singing. Opportunities for vocal ensemble students include multiple school and community concerts, performing at grad, performing the anthem at Oiler games, vocal workshops and clinics, local and provincial festivals, and an international festival once every three years. Vocal students will also be instructed in basic theory, history, composition, and conducting techniques. Students will apply skills and knowledge learned to the preparation and performance of vocal music repertoire. Students will be required to be present during evening and weekend performances.


## OTHER OPTIONS

## Leadership 15 / 25 / 35

## Prerequisite: Each course needs the previous level completed.

- Leadership is an engaging course that is designed to unlock the potential within each student. Students will embark on a journey of self-discovery and empowerment. This course is not just about learning leadership skills, it is about students becoming leaders that they were meant to be. Through dynamic experiences and hands-on activities, you'll cultivate essential leadership qualities while making a tangible impact on the school and community. The unique class approach emphasizes character development, guiding students not only to lead effectively but also to embody integrity and social responsibility. By the end of the Leadership series, students will emerge as engaged thinkers, principled citizens and socially conscious individuals.


## CREATIVE WRITING

## Creative Writing and Publishing 15 (5 credits)

- This course is designed for students who have a strong interest or passion for writing. It focuses on the creative process in a variety of genres (poetry, fiction, non-fiction, screenplays) and provides publishing opportunities for students to showcase their work.


## Creative Writing and Publishing 25 (5 credits)

Prerequisites: Creative Writing and Publishing 15

- This course is designed to allow students to continue to work towards polished pieces of writing a more advanced level and will continue to explore options for publication.


## Creative Writing and Publishing 35 (5 credits) <br> \section*{Prerequisites: Creative Writing and Publishing 25}

- Students will follow their writing interests and passions. Opportunities to write in a variety of creative writing genres encourage students to experiment with new ideas, concepts, and processes in their writing. Students will create and manage their digital portfolios. As students explore and learn about various writing markets, they will demonstrate an understanding and the requirements that different markets have for submissions and assess how to effectively submit their writing to specific publications.


## CERTIFICATE of ACHIEVEMENT

The Knowledge and Employability (K\&E) courses from Alberta Education are available at Foothills Composite High School. These series of classes are designed to meet the needs of students by developing skills to support success in the world of work after high school.

Knowledge and Employability Skills courses are available in English, Mathematics, Science and Social Studies. In addition, courses that focus on employability skills in areas as diverse as foods, culinary, cosmetology, mechanics, fabrication, and construction are offered through our Career and Technology Studies programs.

Students can build coursework through the Knowledge and Employability stream that will lead to a Certificate of Achievement. Completion of the entire series of K\&E core classes and occupational electives leads to a K\&E certificate, not a high school diploma. Students seeking a high school diploma can take advantage of K\&E class transfer points to engage in diploma-level core instruction if they are ready.

It is important to note that K\&E core classes can be used for a student's general credit count towards a high school diploma, but do not satisfy the high school diploma's core class requirements. This approach to K\&E students and their programs ensures that students can design a program that meets their needs, interests and career and life goals.

Our K\&E students are enrolled in classes and are supported by staff and Learning Coaches.


## English 10-4 K\&E (5 credits)

## Prerequisite: Learning Coach and Teacher Recommendation

- This Grade 10 course is from the Knowledge and Employability series of courses. The intent of K\&E English is to prepare the student for the literacy demands of the workforce as well as assist the student in transition to diploma-level classes in this subject area.


## English 20-4 K\&E (5 credits)

## Prerequisite: English 10-4

- This Grade 11 course is from the Knowledge and Employability series of courses. Successful completion of English 20-4 can transition to English 30-4 (K\&E) or English 20-2 (diploma route).


## English 30-4 K\&E (5 credits)

## Prerequisite: English 20-4

- This Grade 12 course is from the Knowledge and Employability series of courses. English 30-4 is the final English course required for the K\&E certificate and can also transfer directly to English 30-2 in the diploma route.
**Note: Although moving from 30-4 to 30-2 is a permissible transfer, it may be in an upgrading K\&E student's best interest to enroll in 20-2 first to gain greater exposure to English/Language Arts content at the high school diploma level.


## Social Studies 10-4 K\&E (5 credits)

## Prerequisite: Learning Coach and Teacher Recommendation

- This Grade 10 course is from the Knowledge and Employability series of courses. The intent of K\&E Social Studies is to provide students with historical, political, and economic knowledge, as well as critical thinking and practical writing skills required to be a successful worker, Canadian and global citizen.


## Social Studies 20-4 K\&E (5 credits)

## Prerequisite: Social Studies 10-4

- This Grade 11 course is from the Knowledge and Employability series of courses. Social 20-4 K\&E is the final level of Social required for the K\&E certificate and is also a transition point for Social 20-2 in the high school diploma route.


## Mathematics 10-4 K\&E (5 credits)

## Prerequisite: Learning Coach and Teacher Recommendation

- This Grade 10 course is from the Knowledge and Employability series of courses. The intent of K\&E Math is to give the student the numeracy skills required to be a successful worker as well as assist the student in transition to diplomalevel classes in this subject area.


## Mathematics 20-4 K\&E (5 credits)

Prerequisite: Mathematics 10-4

- This Grade 11 course is from the Knowledge and Employability series of courses. Math 20-4 is the final Math course required for the K\&E certificate. Students intending to upgrade to a high school diploma can transfer directly to Math 20-3 but are cautioned that this math course is a significant step up in difficulty from K\&E and that they should consider taking Math 10-3 first to improve their skills and background.


## Science 10-4 K\&E (5 credits)

## Prerequisite: Learning Coach and Teacher Recommendation

- This Grade 10 course is from the Knowledge and Employability series of courses. The intent of K\&E Science is to provide students with the knowledge and skills required to lay the foundations of scientific understandings at a basic level.


## Science 20-4 K\&E (5 credits)

## Prerequisite: Science 10-4

- This Grade 11 course is from the Knowledge and Employability series of courses. Science 20-4 is the final Science course required for the K\&E certificate and transfers to Science 24 in the diploma route.


## OFF:CAMPUS EDUCATION

The Foothills Composite High School Off-Campus Education programs are designed to help all students recognize their special gifts, talents, and interests, and to put education into a meaningful framework. Our programs play a vital role in assisting students' transition into the workforce and postsecondary education through their participation in out-of-class study while gaining their high school diploma. To graduate from a high school in Alberta, students must earn at least 100 credits. 20 of those credits can be from our programs. Students interested in these programs should contact the Off-Campus Education Advisor.

## OFF-CAMPUS PREREQUISITES (1 credit/module)

## HCS 3000: Workplace Safety Systems (1 Credit)

- Needed for the Work Experiences Program
- Students will gain attitudes, knowledge and skills related to workplace health and safety and examine relevant legislation required in the workplace. Students will describe and explain the workplace health and safety management systems and recognize and incorporate hazard identification, assessment, and control. Students will complete this course online - it can be accessed through the Off-Campus Coordinator or Academic \& Career Advisor.


## HCS 3010: Workplace Safety Systems (1 Credit) <br> - Needed for the RAP Program

- HCS is the follow-up course to HCS 3000. This course gives students even more in-depth safety knowledge and offers comprehensive information and instructions on specific safety situations. This course contains practical safety tips, lessons and updated WHMIS information.


## AGR 3000: Agriculture Safety

- Needed for the Green Certificate
- HCS This course offers standard safety information and practices for those students hoping to work or live in an agricultural setting. It teaches not only the basics of workplace safety, but also detailed information about specific safety issues and hazards on farms, and how to work safely in that environment.


## WORK EXPERIENCE PROGRAM 15/25/35 ( 1 credit per 25 hours)

## Prerequisite: HCS 3000

## Apply through: Off-Campus Work Experience Coordinator

Work Experience is available to high school students who are already working or volunteering and want to earn credits towards their high school diploma.

- Students can earn up to 35 credits ( 20 towards the first 100 credits).
- Students can earn 10 credits in each level of Work Experience 15 (grade 10), 25 (grade 11) and 35 (grade 12) and 5 credits in Career Internship 10.
- One credit is earned for every 25 hours worked and a minimum of 75 hours ( 3 credits) must be worked to earn any credits.
- Work Experience can be one of the courses used to apply for the Alexander Rutherford Scholarship.


## REGISTERED APPRENTICESHIP PROGRAM (RAP)

Prerequisites: HCS 3000 and HCS 3010

## Apply through: Off-Campus Work Experience Coordinator

The RAP program is designed for high school students who want to begin training in a trade of their choice, work towards becoming an indentured apprentice and earn credits toward their high school diploma. Students usually enter the RAP program in Grade 10 or 11. Initially, the student works with an employer as an assistant/general labourer. This probationary time allows the student and the employer the opportunity to determine whether this trade is a good fit for the student. If the student is interested in pursuing a career in the trade, and the employer feels they have the attitude and aptitude to be a success at the trade, they may apply to become an indentured apprentice.

- An indentured apprentice can earn as many as 1000 hours towards their Journeyman's Certificate.
- For every 125 hours as an indentured apprentice, they will receive 5 RAP credits up to a maximum of 40 .


## GREEN CERTIFICATE

## Prerequisites: AGR 3000

## Apply through: Off-Campus Work Experience Coordinator

Green Certificate is an apprenticeship-style program designed for students interested in the agricultural industry who would like to learn on the job, under the direction of experienced farm personnel, earn high school credits and obtain certification from Alberta Agriculture and Forestry, In each Green Certificate program, students can earn up to 16 high school credits towards their first 100 credits needed to graduate and a Technician Level Green Certificate for their chosen specialization. **Note: Application deadlines vary by program.

Earn industry-recognized certificates from Alberta Agriculture and Forestry in the following areas:

| Green Certificate Areas | $\bullet$ Green House |
| :--- | :--- | :--- |
| $\bullet$ Cow-calf Beef | $\bullet$ Irrigated Field Crop |
| $\bullet$ Dairy | $\bullet$ Poultry |
| $\bullet$ Equine | $\bullet$ Sheep |
| $\bullet$ Feedlot Beef | $\bullet$ Swine |
| $\bullet$ Field Crop | $\bullet$ Beekeeper |

## DUAL CREDIT

## Prerequisites: Depends on Program

## Apply through: Off-Campus Coordinator and Academic \& Career Advisor

These programs are designed for high school students who are interested in a specific career area and would like to work towards post-secondary or workplace certification while still attending high school.
** Not all Dual Credit courses are offered every year.

- Students earn high school and post-secondary credits.


## Sample Offerings:

- Business Management 200 (SAIT)
- Pre-Employment Carpentry (SAIT)
- Veterinary Technical Assistant (Olds)
- Pre-Employment Pipe trades (SAIT)
- Pre-Employment Welding (SAIT)
- Health Care Career Essentials (SAIT)
- Foundation in Emergency Care (SAIT)
- Variety of individual online courses (Olds)
- Pharmacy Assistant (SAIT)



## Alexander Rutherford Scholarship

The Alexander Rutherford Scholarship is offered to students who are residents of Alberta. It is based solely on student achievement. Students apply at the end of their Grade 12 year.

| Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: |
| $\square$ Average of $75.0 \%$ to $79.9 \%$ in five courses - \$300 * <br> $\square$ Average of $80 \%$ or higher in five courses - \$400 | $\square$ Average of $75.0 \%$ to $79.9 \%$ in five courses - \$500 * <br> $\square$ Average of $80 \%$ or higher in five courses - \$800 | $\square$ Average of $75.0 \%$ to $79.9 \%$ in five courses - \$700 * <br> $\square$ Average of $80 \%$ or higher in five courses - $\$ 1300$ |
| Average is calculated from 5 designated courses *Option/Career and Technology Studies (CTS) may also be considered |  |  |
| One of: English 10-1, $10-2$ Français 10-1 or 10-2 | One of: English 20-1, 20-2 Français $20-1$ or 20-2 | One of: English 30-1, 30-2 Français 30-1 or 30-2 |
| At least two of: <br> $\square$ Mathematics 10C <br> $\square$ Science 10 <br> $\square$ Social Studies 10-1 or 10-2 <br> $\square$ A language other than one used above at the Grade 10 Level. | At least two of: <br> $\square$ Mathematics 20-1 or 20-2 <br> $\square$ Chemistry 20 <br> $\square$ Physics 20 <br> $\square$ Science 20 <br> $\square$ Biology 20 <br> $\square$ Social Studies 20-1 or 20-2 <br> $\square$ A language other than one used above at the Grade 11 Level. | At least two of: <br> $\square$ Mathematics 30-1, 30-2 or 31 <br> $\square$ Science 30 <br> $\square$ Social Studies 30-1 or 30-2 <br> $\square$ Biology 30 <br> $\square$ Chemistry 30 <br> $\square$ Physics 30 <br> $\square$ A language other than one used above at the Grade 12 Level. |
| Any two courses with minimum three credit value at Grade 10 (1000 or 4000 series) including those listed above and combined option and introductory CTS courses. | Any two courses with minimum three credit value at Grade 11(2000 or 5000 series) including those listed above and combined option and intermediate CTS courses. | Any two courses with minimum five credit value at Grade 12 (3000, 6000 or 9000 series) including those listed above and combined option and advanced CTS courses. |

For more defailed info on this scholarship visit:
www.studentaid.alberta.ca/scholarships/


[^0]:    ** If students are planning on attending post-secondary school after graduation - five to six 30-level courses are recommended to apply

[^1]:    ${ }^{1}$ Mathematics $30-1$ is a prerequisite or corequisite for Mathematics 31.

[^2]:    ${ }^{* *}$ NOTE: Some colleges (ex.SAIT) may accept these courses as prereqs for programs such as Kinesiology, Paramedics, Emergency Tech Nursing \& Massage, Coaching

