



REGISTRATION HANDBOOK

COURAGE | COMMITMENT | INTEGRITY

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Okotoks, AB T1S 1A7

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<http://fchs.fsd38.ab.ca>



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.

ALBERTA HIGH SCHOOL DIPLOMA REQUIREMENTS

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

COURSES	MINIMUM REQUIREMENTS
English	English 30-1 or 30-2
Social Studies	Social Studies 30-1 or 30-2
Mathematics	20 Level
Science	ONE OF: Science 20, Science 24, Biology/ Chemistry or Physics 20
Physical Education 10	3 credits
Career and Life Management (CALM)	3 credits
SUBTOTAL	56 credits
Career & Technology Studies (CTS) or Fine Arts or French or French Language Arts or Physical Education 20 and/or 30 or Registered Apprenticeship Program (RAP)	10 credits
30 Level courses in addition to English 30-1 or 30-2 and Social Studies 30-1 or 30-2	10 credits
Other Credits (10 credits must be at a 30: not including ELA 30 or SS 30)	24 credits min.
GRAND TOTAL	100 minimum

** If students are planning on attending post-secondary school after graduation – **five to six 30-level courses are recommended to apply.**

COURSE LOAD

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	7-8 Courses minimum	35 or more credits
GRADE TWELVE	Appropriate courses to complete graduation with no less than 10 credits a semester.	

REPEATING COURSES DUE TO FAILING 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 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 - PARENT VIEW 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>



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 have the opportunity to 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



ADVANCED PLACEMENT 3 YEAR PLAN

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

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/high-school#:~:text=Advanced%20Placement%20\(AP\),part%20of%20the%20evaluation%20process.](https://www.ucalgary.ca/future-students/undergraduate/transfer-credit/high-school#:~:text=Advanced%20Placement%20(AP),part%20of%20the%20evaluation%20process.)

The University of Alberta (UofA):

- <https://www.ualberta.ca/admissions/undergraduate/resources/ap-students/advanced-standing-ap-courses.html?>

Mount Royal University (MRU)

- <https://www.mtroyal.ca/Admission/AdmissionRequirements/advanced-placement-courses.htm>



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 – personal student e-mail addresses need to be used to log in.

*** DO NOT use school e-mail accounts as those e-mails are taken away at graduation.

MYBLUEPRINT - Choosing High School Courses & 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:

- Choose their high school courses – plan their 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/>



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
<ul style="list-style-type: none"> • Instrumental Music 10/20/30 • Choral 10/20/30 • Jazz Band 10/20/30 • Symphonic Band 15/25/35 • General Music 10/20/30 • Musical Theatre 10/20/30 • Drama 10/20/30 • Advanced Acting 10/20/30 	<ul style="list-style-type: none"> • Technical Theatre 10/20/30 • Design and Development 10/20/30 • New Media 10/20/30 	<ul style="list-style-type: none"> • Art 10/20/30 • Art History 11/21/31 • Design and Tech Graphic 10/20/30 • Design and Tech Video and Sounds 10/20/30 • New Media 10/20/30 • Professional Studio Arts 15/25/35

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

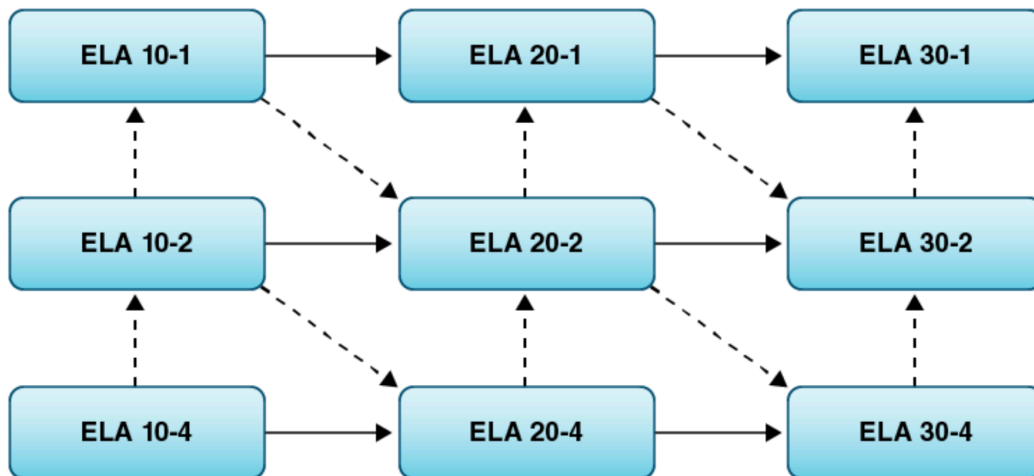
ENGLISH LANGUAGE ARTS COURSES



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



English Language Arts (ELA) Program



————> Typical Progression
- - - - -> Possible Progression

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 book-length 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: 75% 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 non-fiction, 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 10-1AP

- 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: book-length 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 20-1 VS. 20-2

English Language Arts 20-1

English 20-1 and English 30-1 are required for:

- **ALL UNIVERSITY PROGRAMS**
- Even **Sciences!**



English Language Arts 20-2

English 20-2 and 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!

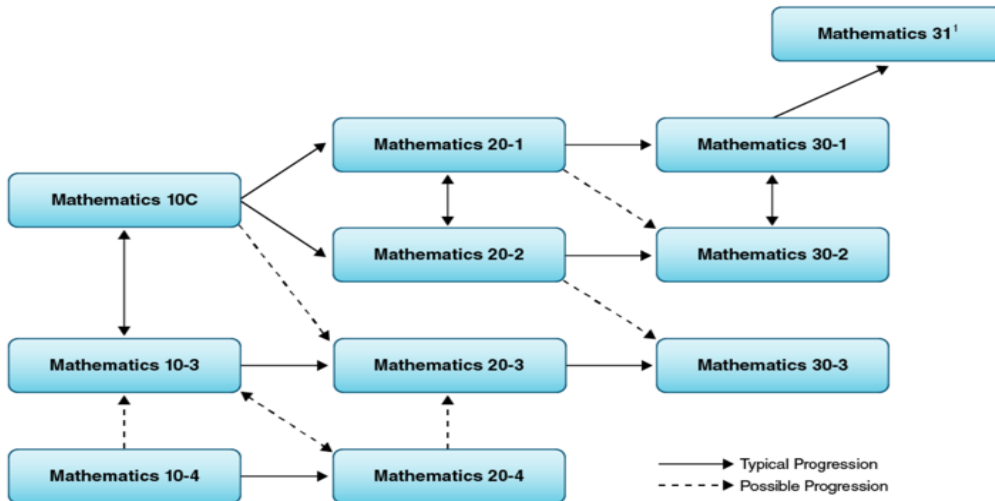
MATHEMATICS COURSES



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



Mathematics Program



(Each course is 5 credits.)

¹ Mathematics 30-1 is a prerequisite or corequisite for Mathematics 31.

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)

MATHEMATICS

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	DESIGNED FOR:	INTENDED FOR:
-1	<p>This course sequence is designed to:</p> <ul style="list-style-type: none"> provide students with the mathematical understanding and critical-thinking skills identified for entry into post-secondary programs that require the study of calculus. 	<ul style="list-style-type: none"> Is intended for students planning to take Calculus in university (areas of Math, Science, Engineering, and some Business Programs) Math 10C stands for 10 "Combined" - it is the starting point for both the Math -1 and Math -2 course sequences. Mathematics 30-1 is a co-requisite for Mathematics 31 & may be required for post-secondary calculus courses.
-2	<p>This course sequence is designed to:</p> <ul style="list-style-type: none"> provide students with the mathematical understanding and critical-thinking skills identified for entry into post-secondary programs that do not require the study of calculus. 	<ul style="list-style-type: none"> Is intended for university, college, and technical institute programs that do not require Calculus (this is a challenging sequence with a strong foundation in algebra) After completing Mathematics 20-1, students can continue to Mathematics 30-1. Can also take Math 30-2 or Math 30-3 if more appropriate for future goals.
-3	<p>This course sequence is designed to:</p> <ul style="list-style-type: none"> provide students with the mathematical understanding and critical-thinking skills identified for entry into post-secondary programs that do not require the study of calculus. 	<ul style="list-style-type: none"> Is intended for students planning to enter the workforce and/or pursue an Apprenticeship Program (where 30-2 is not required) https://tradesecrets.alberta.ca/sources/pdfs/entrance_requirements.pdf
AP Advanced Placement	<p>This course sequence is designed to:</p> <ul style="list-style-type: none"> 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. Offer students opportunity to receive first year university credits. 	<ul style="list-style-type: none"> Is intended for high-achieving students who are looking for an enriched academic program. Successful completion of the College Board exam can be recognized as credit in first-year university courses at many colleges and universities around the world.

MATHEMATICS

MATH 10C (-1) (5 credits)

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

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.
- 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 post-secondary 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 20 LEVELS EXPLAINED...



MATH 20-1	MATH 20-2	MATH 20-3	Notes
<p>Math 20-1 & Math 30-1 are required for:</p> <ul style="list-style-type: none">• All Math and Science programs• Some Business Degrees	<p>Math 20-2 leads to Math 30-2 which is a:</p> <ul style="list-style-type: none">• University accepted course for all programs that do not have a specific Math 30-1 requirement	<p>Math 20-3 is the stream if you passed Math 10-3 or Math 10C prep OR if you did not pass Math 10C.</p> <ul style="list-style-type: none">• It is acceptable into trades and...• All college programs that do not have a specific math entrance requirement	<ul style="list-style-type: none">• 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 30-1 (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.
 - 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 AB 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

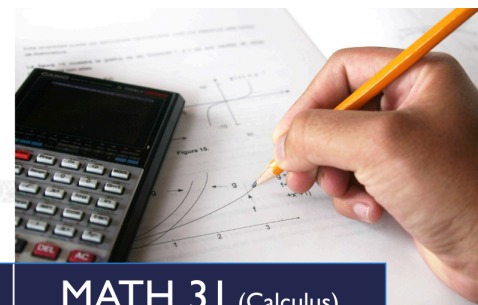
Math 31 (5 credits)

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
 - Integrals

MATH 30 LEVELS EXPLAINED...



MATH 30-1	MATH 30-2	MATH 30-3	MATH 31 (Calculus)
<p>Math 30-1 is required for all:</p> <ul style="list-style-type: none">• Math and Science University programs• As well as some Business degrees.• Math 31 (CALC) is only required for engineering.	<p>Math 30-2 is a:</p> <ul style="list-style-type: none">• Is an Academic Math course that is accepted in many University Programs.• If not focused on going into a Science-based or Engineering program, Math 30-2 can be a great choice.	<p>Math 30-3 is:</p> <ul style="list-style-type: none">• The stream if you passed Math 30-3 OR if you did not pass Math 20-1 or 20-2.• It is acceptable into trades and all college programs that do not have a specific math entrance requirement	<p>Math 31 is a:</p> <ul style="list-style-type: none">• Demanding pre-calculus course• Required for competitive university programs• Where a minimum 80 per cent score is necessary

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!**

Social Studies Information

SOCIAL STUDIES COURSES

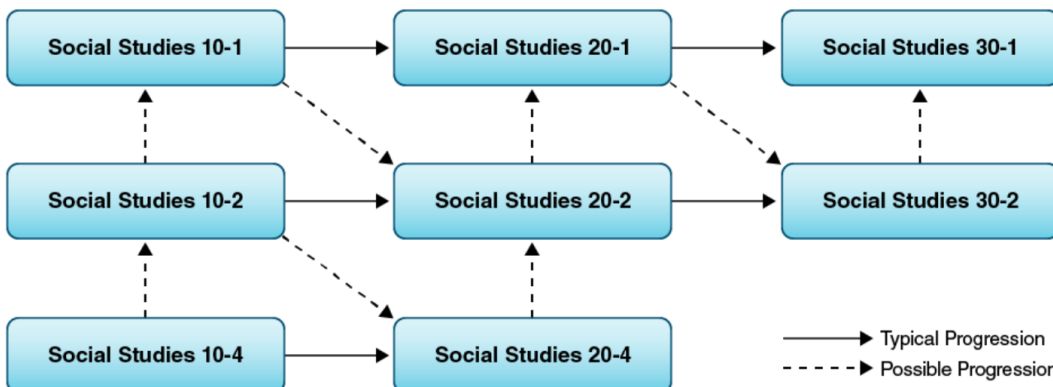


ÉCOLE SECONDAIRE FOOTHILLS COMPOSITE HIGH SCHOOL
ALBERTA HIGH SCHOOL OF FINE ARTS



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)

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.

SOCIAL STUDIES 20-1 VS. 20-2

Social Studies 20-1

Social 20-1 and Social 30-1 are:

- **REQUIRED FOR ALL UNIVERSITY PROGRAMS**
- Such as **Journalism, Law, and History/Geography**
- **Higher average** is recommended to pass into the Social 20-1 stream from Social 10-1

Social Studies 20-2

Social 20-2 and Social 30-2 are:

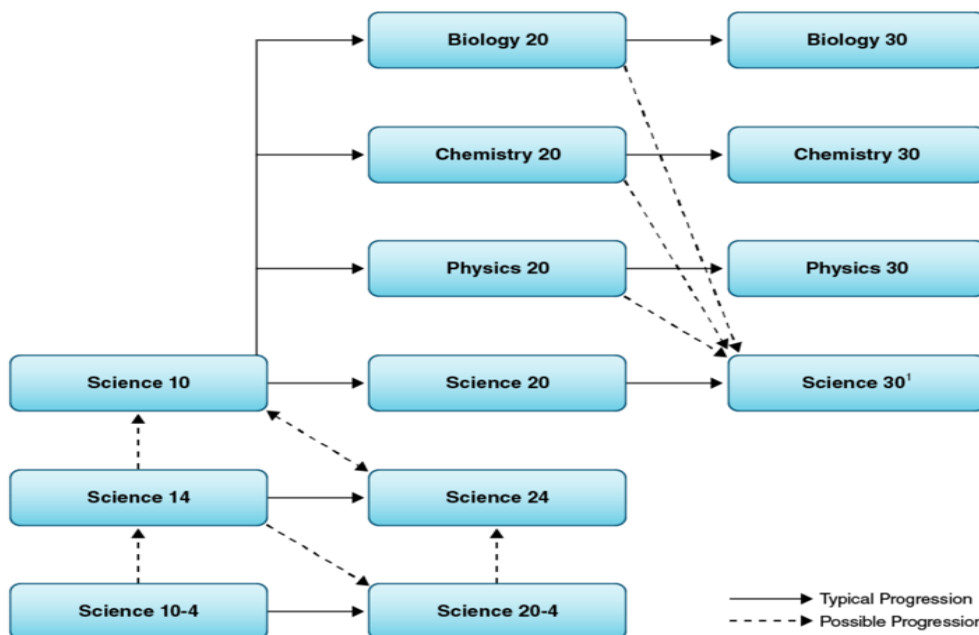
- considered **option courses** in all universities **NOT an academic**
- Some universities **will not allow** students to use Social 30-2 at all.
- Students **must be sure to check** before dropping down to social 20-2 (or 30-2) to "boost their averages."

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

(5 credits each)

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 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 units 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	Biology 30	Physics 30	Science 30
<p>Chemistry 30 is required as a prerequisite for courses in:</p> <ul style="list-style-type: none">• Biological Science• Engineering• Chemistry• Geosciences• Math & Physics• Nursing• Animal Science• Astronomy Programs <p>– basically anything to do with the Earth, human body, animals, and/or Math</p>	<p>Biology 30 is required as a prerequisite for courses in:</p> <ul style="list-style-type: none">• Biological Sciences• Athletic Therapy• Kinesiology• Nursing <p>– basically anything to do with the Earth, human body, and/or animals</p>	<p>Physics 30 is recommended for all</p> <ul style="list-style-type: none">• Biological Sciences• Chemistry• Engineering• Geosciences• Physics• Astronomy Programs• Applied Mathematics Major (<i>must have at least Physics 20</i>)	<p>Science 30 can be used as a university entrance science for all:</p> <ul style="list-style-type: none">• Non-science based Programs• Some Nursing programs.

General Science 20 is **not required** for **Science 30**. Students can take Science 30 in grade 12 as long as they have passed one of the other specific sciences. **Science 20** is **recommended** if a student achieves less than average marks in Science 10.

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
<ul style="list-style-type: none"> • Average of 75.0% to 79.9% in five courses - \$300 * • Average of 80% or higher in five courses - \$400 	<ul style="list-style-type: none"> • Average of 75.0% to 79.9% in five courses - \$500 * • Average of 80% or higher in five courses - \$800 	<ul style="list-style-type: none"> • Average of 75.0% to 79.9% in five courses - \$700 * • Average of 80% or higher in five courses - \$1300
<p>Average is calculated from 5 designated courses *Option/Career and Technology Studies (CTS) may also be considered</p>		
<p>One of:</p> <ul style="list-style-type: none"> • English 10 -1, 10 -2 • Français 10-1 or 10-2 	<p>One of:</p> <ul style="list-style-type: none"> • English 20 -1, 20 -2 • Français 20 -1 or 20 -2 	<p>One of:</p> <ul style="list-style-type: none"> • English 30- 1, 30-2 • Français 30 -1 or 30 -2
<p>At least two of:</p> <ul style="list-style-type: none"> • Mathematics 10C • Science 10 • Social Studies 10 -1 or 10 -2 • A language other than one used above at the Grade 10 Level. 	<p>At least two of:</p> <ul style="list-style-type: none"> • Mathematics 20 -1 or 20 -2 • Chemistry 20 • Physics 20 • Science 20 • Biology 20 • Social Studies 20 -1 or 20 -2 • A language other than one used above at the Grade 11 Level. 	<p>At least two of:</p> <ul style="list-style-type: none"> • Mathematics 30 -1, 30 -2 or 31 • Science 30 • Social Studies 30 -1 or 30 -2 • Biology 30 • Chemistry 30 • Physics 30 • A language other than one used above at the Grade 12 Level.
<p>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.</p>	<p>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.</p>	<p>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.</p>

For more detailed info on this scholarship visit:

www.studentaid.alberta.ca/scholarships/

