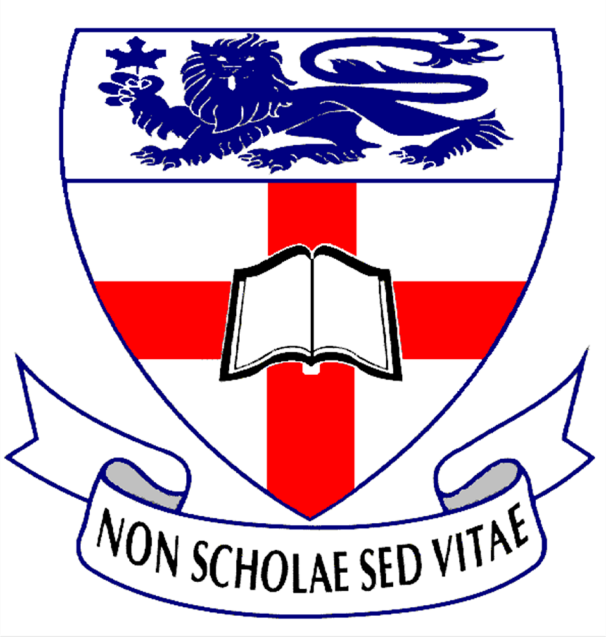
SIR WINSTON CHURCHILL HIGH SCHOOL

COURSE PLANNING GUIDE 2026-2027



SIR WINSTON CHURCHILL HIGH SCHOOL PLANNING GUIDE
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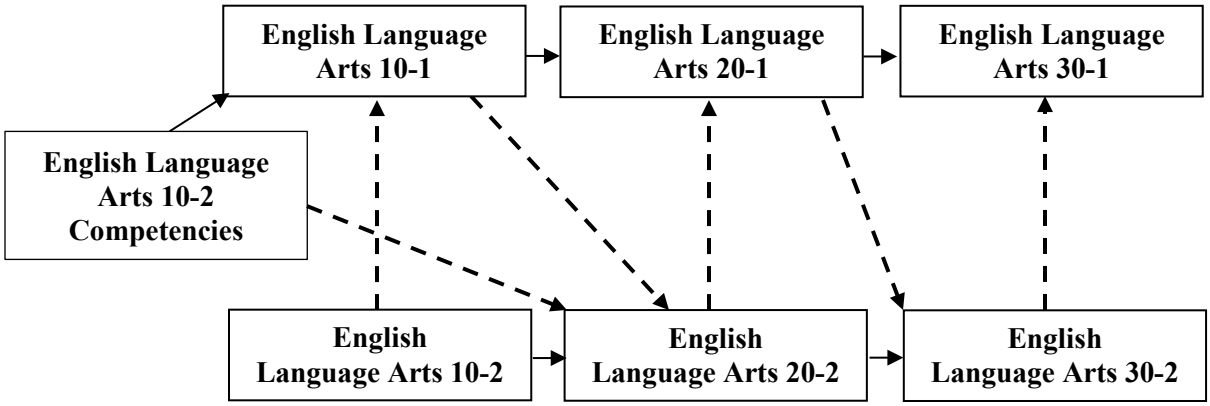
ACADEMIC COURSES

ENGLISH LANGUAGE ARTS

ELA 10-1, 20-1 and 30-1 are academically rigorous courses focused on the study, creation, and analysis of literary texts. Students registering in these courses should have demonstrated strengths in both their reading comprehension and writing skills.

ELA 10-2, 20-2 and 30-2 are courses focused on the exploration of text in popular culture and real-world contexts. Students registering in these courses may benefit from continuing support in reading and writing. This program can lead to the -1 program.

Students should check with a guidance counsellor for more specific information regarding post-secondary entrance requirements.



English Language Arts 10-1 - 5 credits
This is an academically demanding course designed to help students develop skills in reading, writing, listening, and oral communication. Assignments will encompass formal essays, critical analysis, personal responses, and creative writing for a variety of audiences and purposes. This course serves as preparation for ELA 20-1 and ELA 20-1 IB. Course content includes the study of short stories, novels, poetry, Shakespearean or modern drama, film, and non-fiction.

English Language Arts 10-2 - 5 credits
This course is designed to help students develop fundamental skills in reading, writing, listening, viewing, and oral communication. Teachers will offer an integrated approach in the development of language arts skills by using short stories, novels, poetry, modern drama, film, and non-fiction for discussion and writing. Assignments and activities stress personal, analytical and functional writing for a variety of audiences, contexts, and purposes.

English 10-2 Competencies – 5 credits
ELA 10-2 Competencies is a course designed for students who are interested in the 10-1 course, but who need more time to build their analytical, reading and writing skills to successfully transition to the 10-1 course. The course aims to enhance student ability to think critically and analytically, with a focus on developing the reading and writing skills necessary for success with the literature covered in the 10-1 stream. Students registering in this course should have a sincere commitment to improving their skills. Upon successful completion of English 10-2 Competencies, students will earn credits in English 10-2. Students will take English 10-2

Competencies in Semester 1 in place of one of their complementary courses, and upon successfully completing the course, will be registered for English 10-1 in Semester 2.

> **Rationale:** The ability to master a language is time consuming. Oftentimes, students have strong ideas, but unfortunately their writing ability does not enable them to communicate ideas clearly. At other times, students are hesitant readers who require additional strategies regarding the analysis of literature. This course aims to give students who have struggled with English Language Arts in the past, or who are English Language Learners, the opportunity to hone the skills necessary for best success in an English 10-1 program.
>
> **Please Note:** English 10-2 Competencies is not the best placement for a student who would be more successful in an English 10-2 class. Please keep in mind that students passing English 10-2 Competencies in Semester 1, will then have English 10-1, along with 2 other academic core classes in Semester 2. Some students are best placed in English 10-2 for grade 10, English 20-2 in grade 11, and then English 30-2 in grade 12.

English Language Arts 20-1 - 5 credits
Prerequisite: English Language Arts 10-1
Recommendation for Success – at least 65% in ELA 10-1
This is an academically demanding course that continues to develop more effective skills in reading, writing, listening and oral communication through an exploration of various genres including short stories, novels, poetry, Shakespearean and modern plays, film, and non-fiction.

English Language Arts 20-2 - 5 credits
Prerequisite: English Language Arts 10-2 ***OR*** *40% in ELA 10-1*
This course continues to help develop the fundamental skills in reading, writing, listening, viewing and oral communication by examining a variety of texts and literary forms.

English Language Arts 30-1 - 5 credits
Prerequisite: English Language Arts 20-1 ***OR*** *a mark of 65% in ELA 30-2 and teacher recommendation*
Recommendation for Success: 65% in English Language Arts 20-1
This is an academically demanding course that continues to survey a variety of literature and other texts, with emphasis on understanding and analyzing themes and literary techniques. It is also designed to help students continue to develop and reinforce effective skills in reading, writing, representing, viewing, listening and speaking.

Students will be required to write the Alberta Diploma Exam upon completion of the course.

English Language Arts 30-2 - 5 credits
Prerequisite: English Language Arts 20-2 ***OR*** *40% in English Language Arts 20-1*
This is a course that emphasizes the integration of life skills with a study of language, media, and literature. Students will strengthen their skills to express their ideas through reflective, explorative, and persuasive forms of writing.

Students will be required to write the Alberta Diploma Exam upon completion of the course. Students wishing to graduate with ELA 30-1 credits need to register in 30-1 after successfully completing ELA 30-2. A minimum grade of 65% is recommended to do this.

ENGLISH as an ADDITIONAL LANGUAGE (EAL)

EAL Introduction (Level 1 & 2) - 5 credits
This is a beginner level class offered for our level 1 and 2 students. In this class, students focus on reading, writing, grammar, and vocabulary as well as learning some basic communication skills. Students enrolled in this class will be working towards completing Alberta ELL Proficiency Benchmarks 1 and 2.

EAL Introduction to Canadian Studies 15 - 5 credits
This is a Social Studies course designed for students who are new to Canada. The course teaches Canadian social issues, geography, history, politics, and culture. Students work on their reading, writing, speaking and listening skills while learning about Canada. This class is for students who are working on completing Alberta ELL Proficiency Benchmarks 1 and 2.

EAL Intermediate (Level 3) - 5 credits
This is a low-intermediate/intermediate level English class. Students will continue to develop their language skills and be introduced to analytical reading and writing tasks in preparation for ELA 10-2 and 10-1. There is a strong emphasis on improving writing skills, reading strategies, vocabulary-building, and grammar. This class is for students who are completing Alberta ELL Proficiency Benchmark 3 - 4.

EAL Introduction to Science 15 - 5 credits
This sheltered science course helps students build the vocabulary, knowledge and process skills required for further science courses. Students learn how to write lab reports and develop investigative and reading skills necessary for science. This class is for students who are working on completing Alberta ELL Proficiency Benchmark 3. Students who successfully complete this course and have their teacher's recommendation progress to Science 10.

ELA 10-2 Competencies (Level 4) - 5 credits
This is an academically geared course designed as a bridge to the English 10-1. There will be an emphasis on building critical analytical reading and writing skills with focused practice on the correct usage of language, including grammar, sentence structure, and diction.
*Progress through each course is individually based. While some students may only require one semester at a level, others may require more time. Course progression will be determined by the teacher assessment of the student's English competencies.

<table>
<tr><th></th><th colspan="2">Level 1&2</th><th colspan="2">Level 3</th><th>Level 4</th><th colspan="3">Level 5</th></tr>
<tr><td rowspan="2">English</td><td>EAL Intro</td><td>EAL Intro</td><td>EAL Intermediate</td><td>EAL Intermediate/Advanced</td><td>10-2 Competencies</td><td>10-1</td><td>20-1</td><td>30-1</td></tr>
<tr><td colspan="4"></td><td>ELA 10-2</td><td>20-2</td><td>30-2</td><td></td></tr>
<tr><td></td><td colspan="2"></td><td colspan="2">Progress through each course is unique to each student. While some students may only require one semester at a level, others may require more time. Course progression will be determined by the teacher assessment of the student's English competencies</td><td colspan="4">It is recommended that students who wish to move from -2 to -1 level, do so at the 20-2 to 20-1 level, as this allows for more time to adapt to the demands and faster pace of the academic stream before entering 30-1.</td></tr>
<tr><td rowspan="2">Social Studies</td><td colspan="2" rowspan="2">EAL Intro to Canadian Studies 15</td><td colspan="2">Social 10-1</td><td>Social 20-1</td><td colspan="3">Social 30-1</td></tr>
<tr><td colspan="2">Social 10-2</td><td>Social 20-2</td><td colspan="3">Social 30-2</td></tr>
<tr><td>Science</td><td colspan="2"></td><td colspan="2">EAL Introduction to Science 15</td><td>Science 10</td><td>Science 20
Bio 20
Chem 20
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Bio 30
Chem 30
Physics 30</td></tr>
<tr><td colspan="5"></td><td>Science 14</td><td>Science 24</td><td></td></tr>
<tr><td>Math</td><td colspan="7">Math will be scheduled based on results of testing completed at Sir Winston Churchill when students arrive, or based on recommendations from Junior High Schools.</td></tr>
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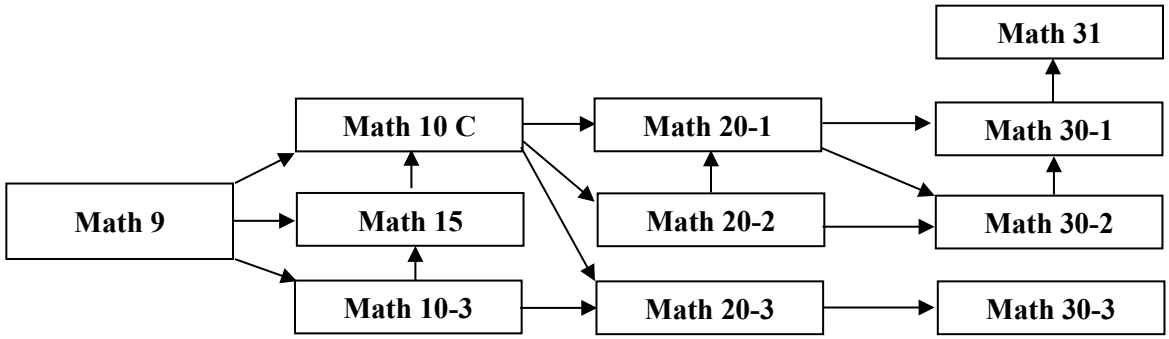
MATHEMATICS



Mathematics 10C - 5 credits
Prerequisite: Successful completion of Mathematics 9
Recommendation for Success: Based on teacher recommendations in Mathematics 9 and Science 9 OR 75% in Math 10-3
This course is designed to serve both the Pre-calculus and Math Foundations streams that begin in grade 11. Students will study polynomials and factoring, coordinate geometry, systems of equations, exponents and radicals, measurement and right-angle trigonometry.

Mathematics 15 (Competencies) – 3 credits
This course is designed to strengthen skills in mathematics. Students who wish to improve math competencies, who found Math 9 challenging, and who wish to attempt Math 10 Common should consider enrolling in this course. Students will study numeracy, exponents, fractions, radicals, linear algebra, functions, and problem solving.

Mathematics 10-3 - 5 credits
This course is designed for students who were not successful in Math 9. Math 10-3 should be taken by students with less than 60% in Math 9 and Science 9. Students will study measurement, geometry, right angle trigonometry and finance.

Mathematics 20-1 - 5 credits
Prerequisite: Mathematics 10C OR *Mathematics 20-2 with teacher recommendation.*
Recommendation for Success: Students should have 65% or better in Mathematics 10C or 75% or better in Mathematics 20-2.
Course content includes algebra and numbers, trigonometry, relations and functions.

Mathematics 20-2 - 5 credits
Prerequisite: Mathematics 10C
This course includes measurement, geometry, number and logic, statistics, relations and functions.

Mathematics 20-3 - 5 credits
Prerequisite: Mathematics 10-3 OR 40% or better in Mathematics 10C.
This course focuses on the Trades. Topics include measurement, geometry, numbers, algebra, and statistics.

Mathematics 30-1 - 5 credits
Prerequisite: Mathematics 20-1 OR Mathematics 30-2 with teacher recommendation
Recommendation for Success: At least 65% in Mathematics 20-1 or in Mathematics 30-2
In this course students will study transformations, polynomial, radical and rational functions, exponential and logarithmic functions, permutations and combinations, trigonometric functions. A diploma exam is written upon completion of this course.

Mathematics 30-2 - 5 credits
Prerequisite: Mathematics 20-2 OR 40% or better in Mathematics 20-1 with a teacher recommendation
Topics in this course include probability, permutations and combinations, polynomial and rational functions, exponential and logarithmic functions. A diploma exam is written upon completion of this course.

Mathematics 30-3 - 5 credits
Prerequisite: Mathematics 20-3 OR 40% or better in Mathematics 20-1 or 20-2 with a teacher recommendation
Topics in this course include measurement, precision and accuracy, sine law and cosine law, polygons, transformations, linear relations, mean, median and mode, buying and leasing vehicles, running a small business

Mathematics 31 - 5 credits
Prerequisite: Mathematics 30-1
Recommendation for success: 70% in Mathematics 30-1
This course is designed for students who are planning to attend university and considering post-secondary studies in mathematics, applied science, engineering or business. The course begins with the study of limits, followed by an introduction to differential and integral calculus in one variable.

PHYSICAL EDUCATION

Physical Education 10 - 5 credits
Required for High School graduation
Students will participate in a variety of team activities and sports where the emphasis is on physical fitness, basic sport skills, strategies, rules, knowledge and understanding of techniques. There are a number of compulsory units, however students will also choose from a variety of activities for the rest of their class curriculum. The course stresses cooperation, sportsmanship, self-discipline and active participation.
Successful completion of the 5 credit course allows enrollment in P.E. 20.

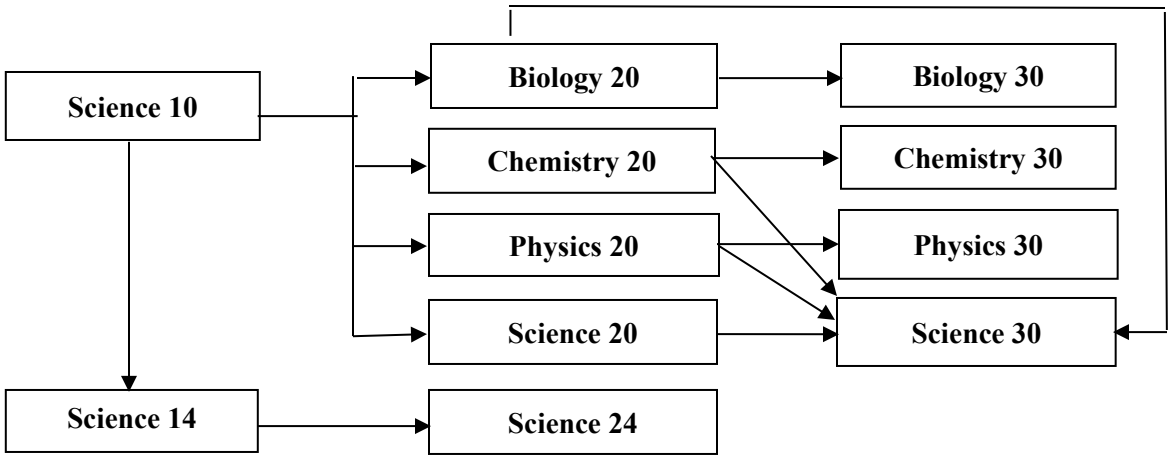
Physical Education 20 – 5 credits
Prerequisite: approved pass from Physical Education 10
Students will participate in individual lifetime-oriented activities. Due to the off-campus nature of the course, classes will require travel time outside of the regular timetable.
Activities include badminton, bowling, broomball, curling, dance, tennis, golf, disk golf, speed skating, dance and kayaking. A snow-shoe unit culminates in a one-day trip to Kananaskis. The 5 credit course has a service component of 4 hours.
Successful completion of the 5 credit course allows enrollment in P.E. 30.

If students are unable to enroll in the 5 credit Physical Education option due to academic programming, a 3 credit course may be available based on approval from guidance. This course would have a service component of 2 hours and would still allow for enrollment in PE 30.

Physical Education 30 - 5 credits
Prerequisite: Physical Education 20 (3 or 5 credits)
This course emphasizes individual off-campus activities and leadership skills. A leadership component will be provided as a valuable opportunity for individual growth. Course activities may include dance, rock climbing, curling, bowling, badminton, low organizational games, kayaking, squash, and golf. The highlight of the course is an outdoor unit culminating in a three-day camping trip in Kananaskis.

The Physical Education 30 course may be used for university entrance in some situations.

SCIENCES



Science 10 - 5 credits
Prerequisite: Successful completion of grade 9 Science
Recommendation for Success: Based on teacher recommendation in grade 9 Science and in grade 9 Math; Math 10 Common or Math 10 Candidate is advised
Science 10 is an integrated academic course designed to help students understand and apply concepts and skills common to biology, chemistry, physics and the environmental sciences. The themes of Science 10 are: energy, matter and change in chemical, technological, living, and global systems. Skills in algebraic problem solving, in tabling and graphing data, and in writing are used throughout the course. Strong math skills are expected. Workplace Hazardous Material Information System (WHMIS 2016) is learned. There are many opportunities for activities, research, lab work and projects. Successful completion of Science 10 should allow the student to develop common skills and attitudes that are a part of the scientific process and enable the student to make wise choices for the completion of a Science program in high school.

Science 14 - 5 credits
Science 14 is a course designed to provide an opportunity for success if students had difficulty in grade 9 Science or grade 9 Math. Science 14 should be considered if a student struggled with grade 9 Science and Math. The units to be covered in the course include properties of matter, energy transfer technologies, matter and energy in living systems, and matter and energy in the environment. Math skills are developed as well. Workplace Hazardous Material Information System (WHMIS 2016) is also learned. If successful in Science 14, the student would normally complete Science 24 next.

Science 24 - 5 credits
Prerequisite: Successful completion of Science 14 or 40% or better in Sci 10 with a teacher recommendation.
Science 24 is intended to allow students to complete the Science credit requirements for an Alberta high school diploma (10 credits). There is no Science course that follows this one. Students should consider taking this course if their Science 14 grade is less than 80%, or they have been recommended to take this course by their Science 10 teacher. The concepts in Science 24 build on those developed in Science 14 and include a study of the applications of matter and chemical change, understanding common energy conversions systems, linking disease defense and human health, and studying motion change and transportation safety. Skills in group or

team work, individual work, lab work, computer use, math skills, reading, writing and communication skills are usually developed in this course.

Biology 20 - 5 credits
Prerequisite: Successful completion of Science 10
Recommendations for Success: 60% in Science 10 overall and 60% in the biology unit of Science 10. Chemistry 20 background and greater than 60% in Math 10 Common would be an asset.
Biology is the study of living systems. Students will study the processes in the exchange of matter and energy in the biosphere, ecosystems and population change, photosynthesis and cellular respiration, and some human systems. An offsite field study is required. Tabling, graphing, and writing skills are used throughout this course. Strong math and communication skills are required. Group work and computer work are expected, and independent study may be undertaken.

Biology 30 - 5 credits
Prerequisite: Successful completion of Biology 20
Recommendations for Success: 60% in Biology 20. Chemistry 20 background and successful completion of Math 20-1 would be an asset.
The concept of maintaining equilibrium is examined through the study of electrochemical and chemical control in human systems. The theme of change is the focus of learning in the study of human reproduction and development. The topics of genetics and molecular biochemistry, as well as changes observed quantitatively in populations and communities are covered in this course. Tabling, graphing, and writing skills are used throughout this course. Strong math and communication skills are required. A diploma exam is written upon completion of this course.

Chemistry 20 - 5 credits
Prerequisite: Successful completion of Science 10
Recommendations for Success: 60% in Science 10 and 60% in the Chemistry unit of Science 10. Students with success in the Chemistry unit of Science 10 will have a better chance to master the concepts in Chemistry 20. Greater than 60% in Math 10 Common is recommended.
Chemistry is the study of matter and its changes. In Chemistry 20 the different states of matter are investigated and the types of attractive forces between particles are discussed. Solutions such as acids and bases are introduced. Mathematical relationships between species in reactions are investigated. Chemical reactions, algebraic problem solving, skills in tabling data and graphing, and writing are used constantly. Strong math and communication skills are expected. Skills (from Science 10) in naming chemicals, writing formulas, and balancing reactions, are expected at the beginning of this course.

Chemistry 30 - 5 credits
Prerequisite: Successful completion of Chemistry 20
Recommendation for Success: 60% in Chemistry 20. Successful completion of Math 20-1 is recommended.
Chemistry 30 requires mastery of some topics taken in Chemistry 20 and extends these topics in the study of introductory organic chemistry, energy changes in chemical reactions, acid-base chemistry, reaction rates and equilibrium concepts, and a detailed study of oxidation-reduction reactions. Algebraic problem solving and skills in tabling, graphing data and writing are used constantly. Strong math and communication skills are necessary. A diploma exam is written upon completion of this course.

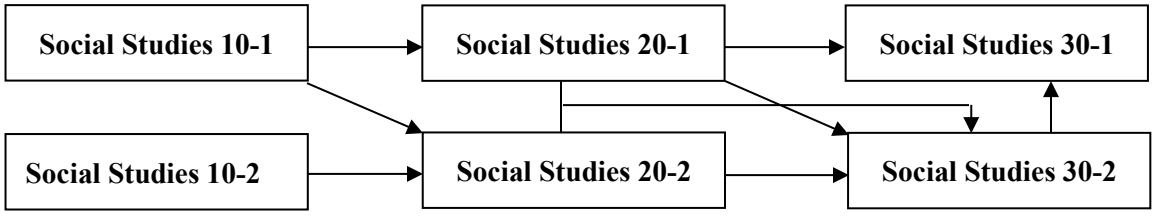
Physics 20 - 5 credits
Prerequisite: Successful completion of Science 10
Recommendation for Success: 60% in Science 10 overall and 60% *in the Physics unit of Science 10. At least 60% in Math 10 Common is recommended. Completion of/or concurrent registration in Math 20-1 is recommended.*
Physics is the study of matter and energy and their interactions. Through a study of physics, an opportunity is given to explore and understand the natural physical world and to become aware of the influence of physics on our lives. Topics include kinematics, dynamics, periodic motion and conservation of energy. Skills in algebraic problem solving, tabling and graphing data are used throughout the course. Success in this course depends on strong math and communication skills.

Physics 30 - 5 credits
Prerequisite: Successful completion of Physics 20
Recommendations for Success: 60% in Physics 20. Greater than 60% in Math 20-1 is recommended.
This is a continuation of the study of Physics concepts, with the addition of more abstract topics. It emphasizes conservation laws (especially momentum and energy), electricity and magnetism, field theory, electromagnetic induction and waves, models of the atom, wave-particle duality and radioactivity. Algebraic problem solving, tabling, graphing and writing skills are used throughout this course. Strong math and communication skills are required. A diploma exam is written upon completion of this course.

Science 20 - 5 credits
Prerequisite: Successful completion of Science 10
Recommendations for Success: 60% *in Science 10. Successful completion of Math 10 Common (greater than* 60%) *is expected.*
Science 20 is an **academic** Science course that has been designed to fit students' needs if they intend to go into post-secondary studies leading to a non-Science career. This course is designed to help students become scientifically literate adults by exposing them to a variety of Science topics from Biology, Chemistry, Physics, and Earth Science. The theme of change is explored in relation to geologic evidence, matter and energy in the biosphere, in chemical systems, and in velocity, acceleration, force and momentum. Algebraic problem solving, tabling, graphing and writing skills are used throughout this course. Strong math and communication skills are recommended.

Science 30 - 5 credits
Prerequisite: Successful completion of any of Science 20, Chemistry 20, Biology 20 or Physics 20
Recommendations for Success: 60% in the prerequisite course. Successful completion of Math 20-1 is expected
Science 30 is an **academic** Science course. There is a major emphasis throughout this course upon developing skills in using scientific knowledge to make personal decisions. Science 30 continues the integration of the Science disciplines. The four units of study include living systems responding to their environment, chemistry in the environment, electromagnetic energy, and energy and the environment. Algebraic problem solving, tabling, graphing and writing skills are used throughout this course. Strong math and communication skills are required. A diploma exam is written upon completion of this course.

SOCIAL STUDIES



Social Studies 10-1 - 5 credits
Prerequisite: Social Studies 9
This course will examine multiple perspectives on the origins of globalization, and the impacts of globalization on culture, economies, human rights and quality of life for the world community. Students will examine these relationships with the goal of enhancing their skills for effective participation as citizens in a globalizing world.

The use of multiple perspectives will encourage the examination of globalization on Canadians (including impacts on Aboriginal and Francophone communities), as well as the global population. Themes of study will include concepts such as identity development and cultural diffusion, historical studies of globalization and imperialism and the effects on contemporary, economic development, the status of human rights, and citizen's roles, and the global community for both indigenous and non-indigenous peoples.

Social Studies 10-2 - 5 credits
Prerequisite: Social Studies 9
This course will allow students to explore historical aspects of globalization as well as the effects of globalization on lands, cultures, human rights and quality of life. Students will explore the relationships between globalization, citizenship and identity. The infusion of multiple perspectives will allow students to examine the effects of globalization on people in Canada and other locations, including the impact on Aboriginal and Francophone communities. Students will develop skills to respond to issues emerging in an increasingly globalized world.

Social Studies 20-1 - 5 credits
Prerequisite: Social Studies 10-1
Recommendation for success: 65% in Social Studies 10-1
In this course, students will explore the complexities of nationalism in Canadian and international contexts. They will study the origins of nationalism and the influence of nationalism on regional, national, international and global relations. The infusion of multiple perspectives will allow students to develop an understanding of nationalism and how nationalism contributes to the citizenship and identity of peoples in Canada. Themes of study will include concepts such as the relationship between nation and nation-state, the various types of nationalism (ethnic, civic, religious, political, economic, cultural, linguistic, spiritual and psychological), the connection between nation and identity, and the development of nationalism.

Social Studies 20-2 - 5 credits
Prerequisite: Social Studies 10-2 or 40% or better in Soc 10-1 with a teacher recommendation.
In this course, students will examine historical and contemporary understandings of nationalism in Canada and the world. They will explore the origins of nationalism as well as the impacts of nationalism on individuals and communities in Canada and other locations. Examples of nationalism, ultranationalism, supranationalism and internationalism will be examined from multiple perspectives. Students will develop personal and civic responses to emergent issues related to nationalism.

Social Studies 30-1 - 5 credits
Prerequisite: Social Studies 20-1 OR Social Studies 30-2
Recommendation for Success: 65% in prerequisite courses
This course is intended for students who have an interest in ideas and issues drawn from history, geography, economics, social science, and the humanities. Students will explore the origins and complexities of ideologies and examine multiple perspectives regarding the principles of classic and modern liberalism. An analysis of various political and economic systems will allow students to determine the viability of the principles of liberalism. Developing understandings of the roles and responsibilities associated with citizenship will encourage students to respond to emergent global issues. This understanding will enable students to effectively investigate, analyze and evaluate government policies and actions and develop individual and collective responses to contemporary local, national, and global issues. A diploma exam is written upon completion of this course.

Social Studies 30-2 - 5 credits *or 40% or better in Soc 20-1 with a teacher recommendation.*
Prerequisite: Social Studies 20-1 OR Social Studies 20-2
In this course, students will examine the origins, values and components of competing ideologies. They will explore multiple perspectives regarding relationships among individualism, common good and collectivism. An examination of various political and economic systems will allow students to assess the sustainability of the practices of political and economic systems and the viability of the values of liberalism. Developing understandings of the roles and responsibilities associated with citizenship will encourage students to respond to emergent global issues. An awareness of the evolution of ideologies is key to comprehending and responding to local, national and global issues. A diploma exam is written upon completion of this course.

Psychology 30 - 6 credits
Prerequisite for Psychology: Social Studies 20-1 ***OR*** *Social Studies 20-2*
Prerequisite for Applied Sociology: Social Studies 20-1 ***OR*** *Social Studies 20-2*
This course consists of two-term courses for 3-credits each (Psychology and Applied Sociology). Students can either take the first term course of Psychology only or choose to continue with the second term course Applied Sociology, for another 3 credits. Please note the prerequisites for each term course.

Experimental Psychology: This is a complementary academic course designed to introduce students to the social science of psychology. An intriguing science focusing on how the mind works, psychology is relevant and useful to every one of us. Students will explore a variety of topics and theories including cognitive processes (learning, thought, memory), personality theory, human development, stress, mental health and mental illness, therapy, altered states of consciousness, positive psychology, research methodology, and many more! Students will experience a variety of learning opportunities to develop their understanding of mental processes, and to build perspective on how and why human beings act and interact in this world.

Applied Sociology: Students will engage their critical thinking skills in this introduction to *the study of human society*. Exploring topics from socialization, culture, gender, conformity, and media to social institutions, movements, and change, students are challenged to think like a sociologist and examine assumptions about society. Throughout the course students formulate sociological questions and participate in a variety of class activities and discussions, building connections between their personal experiences and the larger social forces around them.

INTERNATIONAL BACCALAUREATE

Students who love learning and enjoy rigorous academic challenges should consider the International Baccalaureate (IB) program. IB students are self-motivated, engaged in learning, and resilient. Success in an IB program will depend on the student's ability to:

- handle a demanding workload at a quick pace
- work to understand concepts and their development rather than just memorize
- learn to become an independent, self-disciplined student
- face challenges with enthusiasm and resilience

Students have two candidacy options in IB: Diploma or Diploma Course.

Diploma - students take a full IB program that includes 6 IB courses. In addition, students will complete Theory of Knowledge, Extended Essay and CAS (Creativity, Activity and Service).

Diploma Course - students must take a minimum of two IB courses plus Theory of Knowledge and CAS.

In May of either the Grade 11 or Grade 12 years, or both, students will write challenging IB exams and, when applicable, the Alberta Education Diploma exams in January and/or June.

Additional costs – students will be responsible for IB subject fees (currently $220 per subject and $30 per year for a CBE IB registration fee).

IB courses are: Higher Level (HL) and Standard Level (SL). Higher Level courses are in-depth two-year studies of a particular subject, usually beginning in grade 11, except Math HL. Higher Level courses are similar in difficulty to a first-year University course. Standard Level courses are normally more than one year study duration, beginning in grade 10 or grade 11. They do not go into depth or detail of HL courses. Universities usually only recognize HL courses for credit.

IB Courses Offered through Sir Winston Churchill:

1. Studies in Language and Literature - English Literature
2. Language Acquisition - French SL, Mandarin SL*, Cantonese SL* or French ab initio, Mandarin ab initio*, Spanish ab initio
3. Individuals and Societies –World History HL, Business Management SL, Economics HL, Psychology SL
4. Sciences: Chemistry HL, Physics SL, Biology SL, Computer Science HL
5. Mathematics SL/HL
6. Visual Arts HL

*NB *Cantonese IB and Mandarin IB are offered at The Chinese Academy, a Saturday Chinese school, in partnership with the Calgary Board of Education.*

Admission into IB
Students usually apply in November of Grade 10 for admission into the IB program. Selection is granted on a course-by-course basis, and the admission criteria are:

1. a mark of 75% ***OR*** better depending on the course
2. a positive recommendation by the subject area and other teachers
3. priority placement for (full) IB Diploma Candidates

If students accept placement in IB **they will be expected to fulfill their 2-year commitment to the program** not withstanding unforeseen circumstances. Withdrawal from the program will be granted only with IB Coordinator's consent, not at the student or parents' request. Not achieving the grades, you would like is not a reason to request an exit from the IB program. There is a second round of application for grade 10 students in April of their grade 10 year, for English HL, Computer Science HL, Economics HL, Chemistry HL, World History HL, Psychology SL, Art HL, French ab initio, French SL, Spanish ab initio.

Please select IB courses cautiously.

Over the next two years, in order to fulfill the IB Diploma Requirements and an Alberta Education High School Diploma, a grade 10 student seeking a full IB Diploma must register for the following:

1. Math 10 Cohort IB and Science 10 in semester 1.
2. Math 20 IB, one Physics 20 IB **or** Biology 20 IB, **or** Business Management Intro IB for the second semester of Grade 10.
3. PE 10.
4. International language at SWC:
    - French 10, 20 or 30 IB (depending on their previous French background)
    - Mandarin/Cantonese 10 (at the Chinese Academy)
    - Spanish 10
5. CALM 20.
6. Theory of Knowledge, Extended Essay and CAS.
7. 3 HL subjects.
8. 3 SL subjects.

HL subjects are:

Chemistry 30/35 IB HL
Computing Science 30 IB HL
Economics 20/30 IB HL
English 20/30/35 IB HL
Math 30/31/35 IB HL
Visual Art 30/31 IB HL
World History IB HL

SL subjects are:

Biology 20/ 25/30 IB SL
Business Management Intro/Advanced IB SL
Math 20/30/31 IB SL
Physics 20/25/30 IB SL
Psychology 20/30 IB SL

Language ab initio:

- *French IB ab initio 20 and 30*
- *Mandarin/Cantonese IB ab initio 20 and 30*
- *Spanish IB ab initio 20 and 30*

Language B:

- *French 30/31 IB SL*

GRADE 10 COURSE SELECTIONS

Prerequisite – Acceptance into the IB Program

Biology 20 IB SL - 5 credits
Prerequisite: Science 10
This course continues the biology section of Science 10. Topics that are studied may include: an in-depth study of cells and cell processes, cellular respiration, photosynthesis and nutrients. Also, the course introduces the statistics needed for IB science classes. This course is a prerequisite for Biology 25/30 IB SL.

Business Management Intro IB - 3 credits
Suggested course: Financial Management 101
Students will identify basic management and marketing concepts, explore organizational structures, management theories, the nature of business, organizational planning and decision making, growth and the impact of globalization, and the management of change.

Mathematics 20 IB Analysis and Approaches SL/HL- 5 credits
Prerequisite: Math 10 Cohort IB
Students will study an enriched and extended presentation of the Math 20-1 curriculum that include topics such as: probability, statistics, set theory, non-right triangle trigonometry, function and equation analysis. This course is taken in the second semester of the grade ten year. Therefore, candidates must take Math 10 Candidate in the first semester. Continuation in IB Mathematics SL or movement into IB mathematics HL Analysis and Approaches will occur in consultation with Mathematics IB teachers at the end of 20IB.

Physics 20 IB SL - 5 credits
Prerequisite: Science 10
Students will study an enriched presentation of the topics covered in regular Physics 20 and additional IB topics: the scientific process and measurement, with uncertainties as per IB; kinematics and dynamics in one and two dimensions; circular motion with angular motion, with radians as per IB; gravitation; mechanical energy; simple harmonic motion and the mechanical waves. This course is a prerequisite for Physics 25/30 IB. Math 20 IB is strongly recommended for the Physics IB program, as the sequence of topics in the Math IB program more closely matches the needs of the Physics IB SL program.

GRADE 11 IB COURSE SELECTIONS

Art 20/30 IB HL - 10 credits (full year)
Prerequisite: Art 10
Visual Arts 20 IB/30 IB students are introduced to an enriched studio program that provides opportunities to develop technical skills while exploring the following media: drawing, sculpture, printmaking, textiles, mixed media and painting. This is a rigorous and rewarding program where students will begin to develop their own personal vision through studio work and their Visual Art Journal.

Biology 25/30 IB SL - 10 credits (full year)
Prerequisite: Biology 20 IB
Bio 25IB SL
This course contains only IB material. A practical approach is emphasized when using the scientific method cumulating with a major research project. Topics covered include ecology, evolution, and cellular biology.

Biology 30IB SL
Students cover topics similar to those of the Alberta curriculum for Biology 30 with a focus on inquiry, communication, risk-taking and reflection. It covers a wide range of topics, from human physiology, genetics, DNA, cell division, and is designed to provide students with a comprehensive understanding of the natural world.

Business Management Advanced IB - 10 credits
Prerequisite: Business Management 25 IB
Students will continue developing skills in the areas of business and commerce including the exploration of topics such as Human Resources, Accounting and Finance, Marketing, and Operations Management. Mastery of these skills occurs through project-based, real-time learning with continued emphasis on ethics, strategy, innovation and globalization.

Chemistry 20 IB HL - 5 credits
Prerequisite: Science 10
Students will cover all the components of the Chemistry 20 Alberta Program of Studies. In addition, an in-depth study of atomic structure, periodicity, and additional bonding concepts such as hybridization, crystal field theory, ligands and introductory organic nomenclature will be covered. A final lab exam is scheduled for each student near the end of this course. A wide variety of lab experiences are provided.
A major interdisciplinary research project is undertaken.

Computing Science 20IB HL (combined with non-IB 20) – 5 credits
*(not IB courses, but prerequisite***)**
Prerequisite: Computing Science 10
This course introduces students to the programming language of Java. Learners study key modules from both the Alberta Education and IB curricula, including Data Structures, Procedural Programming, Object-Oriented Programming, and Files & File Structures. Students also explore current trends in computing such as Machine Learning. This is a more advanced class that places an emphasis on systematic class design using a subset of UML (Unified Modeling Language), test driven development, debugging and error handling.

Throughout the course, students build increasingly complex programs and complete a software project that prepares them for the IB Internal Assessment in Grade 12. IB11 students additionally participate in the Group 4 Collaborative Research Project. This course develops strong computational thinking, problem-solving, and programming skills for further study in Computer Science.

Economics 20 IB HL – 6 credits
No prerequisites required

- *Why are some countries rich and some countries poor?*
- *Why have income and wealth become more unequally distributed over the past few decades?*
- *How will population aging affect life in the coming decades?*
- *How will the workforce change with advances in robotics, automation, and artificial intelligence?*

Economics is what can help us answer these questions. It is the study of scarcity, the study of how people use resources, or the study of decision-making and how people make decisions about those resources. Economics often involves topics like wealth, finance, recessions, and banking, leading to the misconception that economics is all about money and the stock market. It helps us understand historical trends, interpret today's headlines, and make predictions for coming decades.

Economics is a relatively new social science that touches upon many aspects of our lives and has important effects on the well-being of all people around the world. The study of economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants.

This course emphasizes microeconomics, which deal with economic variables affecting individuals, firms and markets, and macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

This course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. It also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an interdependent world.

English 20 IB HL - 5 credits
Prerequisite: English 10-1
Students are introduced to a wide range of literature. Different genres from various eras and countries are discussed, studied, and compared. An emphasis is placed on examining the effects of writers' craft. There is a great variety of reading, writing, listening, discussing, viewing and representing during this course. The IB Areas of Exploration include Readers, Writers and Texts; Time and Space; and Intertextuality: Connecting Texts. Global issues are explored through literature. Pre-reading, research and text annotation and text purchase is required and assigned prior to the beginning of the course.

Mathematics 30-1/31 IB SL Analysis and Approaches - 10 credits (full year)
Prerequisite: Math 20 IB
In addition to an enriched presentation of all the topics in Math 30-1 and Math 3l, this course is similar in content to the Higher Level, but with questions of a much more straightforward nature, and is suitable for students who already possess a proven sound mathematical background. It is a demanding course containing a broad range of topics including algebra, trigonometry, calculus, and statistics. It is suitable for those students who wish to go on to further study in those subjects with a significant mathematical content. It also has an internally assessed component.

Mathematics 30-1/31 IB HL - 10 credits
(this course continues in to Grade 12)
Prerequisites: Math 20 IB and teacher recommendation
In addition to an enriched presentation of all the topics in Math 30-1 and Math 3l, this course will cover extensions in calculus, reasoning, vectors, matrices, inverse trigonometric functions, probability density functions, sets, relations and groups. This course is suitable only for students of considerable proven ability, along with enthusiasm for the subject in its purest form. This is a very demanding course and is suitable for those wishing to pursue a career in pure math, engineering or physics.

Physics 25/30 IB SL - 8 credits (full year)
Prerequisite: Physics 20 IB
In this course, you will complete all the Alberta Physics Program of Studies in Physics 30, and also complete the requirements for Standard Level Physics 25 Extension IB. Physics 30 explores momentum, field theory, Properties of EMR, development of wave particle duality and evolution of our models for the structure of matter. Beyond the scientific process and measurement, with uncertainties as per IB; Physics extension 25 is includes exploration of Thermophysics, gas laws, circuit analysis, astrophysics and environmental physics. A major interdisciplinary collaborative research project is undertaken. An individual science investigation is completed. This is an enriched, accelerated physics program. Excellent math skills are required, and the Math IB program is strongly recommended concurrently.

Psychology 20 IB SL - 5 credits
No prerequisites required
Ultimately, psychology is the study of the mind and behaviour and attempts to answer questions around the brain, the way we sense and perceive the world around us, processes used in thinking, remembering, and learning, and the way we understand ourselves and how we interact with others.

At its core, Psychology SL is an introduction to three different approaches to understanding behavior: the biological, cognitive and sociocultural approaches. Students will study and critically evaluate the knowledge, concepts, theories and research that have developed understanding in these fields.

Psychology SL also promotes an understanding of the various approaches to research and how they are used to critically reflect on evidence as well as assist in the design, implementation, analysis, and evaluation of the students' own investigations. The themes of research and ethics are integral to the course and paramount to the nature of the subject.

The aims of Psychology are to:

- develop an understanding of the biological, cognitive and sociocultural factors affecting mental processes and behaviors
- apply an understanding of the biological, cognitive and sociocultural factors affecting mental processes and behaviors to at least one applied area of study
- understand diverse methods of inquiry
- understand the importance of ethical practice in psychological research in general and observe ethical practice in their own inquiries
- ensure that ethical practices are upheld in all psychological inquiry and discussion
- develop an awareness of how psychological research can be applied to address real-world problems and promote positive change
- provide students with a basis for further study, work and leisure through the use of an additional language
- foster curiosity, creativity and a lifelong enjoyment of language learning.

Social Studies 20 IB HL - 5 credits
Prerequisite: Social 10-1
This course provides students with an introduction to the discipline of history by surveying the development of Western Civilization from the Enlightenment to the types of government we have in society today. Topics covered include the French Revolution, the Industrial Revolution, World War I, and authoritarian states in the 20th century.

Theory of Knowledge - 3 credits
Mandatory for all IB students.
The aim of this course is to encourage students to reflect on the central question, "How do we know that?", and to recognize the value of asking that question. Other aims include:

- to expose students to ambiguity, uncertainty and questions with multiple plausible answers
- to equip students to effectively navigate and make sense of the world, and help prepare them to encounter novel and complex situations
- to encourage students to be more aware of their own perspectives and to reflect critically on their own beliefs and assumptions
- to engage students with multiple perspectives, foster open-mindedness and develop intercultural understanding
- to encourage students to make connections between academic disciplines by exploring underlying concepts and by identifying similarities and differences in the methods of inquiry used in different areas of knowledge
- to prompt students to consider the importance of values, responsibilities and ethical concerns relating to production, acquisition, application and communication of knowledge.

While other courses are about "what you know", this course is about "how you know." All grade 11 students are required to take TOK. It is offered in a blended format with both an in-class and an online component for full diploma students or as a term course for course students. This course begins in grade 11, and TOK continues to be explored in the core IB subjects at the grade 12 level.

International Languages – ab initio
The two-year ab initio language course is designed for students enrolled in the IB program who have limited experience of learning the target language. The language ab initio course aims to develop a variety of areas of linguistic skills. In addition, students will become familiar with aspects of the everyday life and culture of the countries in which the language of study is spoken. The five prescribed themes are: Identities, Human Ingenuity, Social organization, Sharing the Planet and Experiences. A specific core syllabus and language-specific syllabus for the International Baccalaureate Program (IB) is used to guide the course.

French 20 IB ab initio – 5 credits
Prerequisite: French 10
In addition to covering the French 20 Alberta curriculum, students in this course are challenged further with additional oral, writing and reading comprehension activities within each of the language IB ab themes, thus increasing the breadth and depth of the French 20 course. Attention will also be paid to increase students' cultural awareness of the Francophone community.

Spanish 20 IB ab initio – 5 credits
Prerequisite: Spanish 10
In this Spanish course students will begin to study the five themes of the language IB ab initio curriculum through reading, writing, listening and speaking activities while also fulfilling the Alberta Education language curricular requirements. Students will explore various aspects of Spanish-speaking cultures.

International Languages – B Standard Level

French 30 IB SL – 5 credits
Prerequisite: French 20 or Grade 9 French immersion
This course prepares students for the French 30/31 IB oral, reading comprehension and written exams. The regular French 30 Alberta Education curriculum is initially covered. Additionally, a variety of supplemental readings are added to the program to improve reading comprehension and as a source for developing oral skills. Language, vocabulary, idiomatic expressions and grammatical structures will be introduced using several different types of text and discourse that serve communicative purposes. The five prescribed themes are: Identities, Human Ingenuity, Social organization, Sharing the Planet and Experiences. Students will be able to explore cultural aspects of the Francophone world through the study of texts and visual materials as a means of exploring the history, current events, values and attitudes of a range of French speaking countries. Comparisons to other cultures will be established to celebrate the difference.

GRADE 12 IB COURSE SELECTIONS

Art 31 IB HL - 5 credits
Prerequisite: Art 20/30 IB HL
Students in Art 31 IB continue to explore the exciting connection between their studio work and individual research. Students will have individual and class instruction and work towards creating powerful, and personally meaningful themes in drawing, photography, painting, sculpture and mixed media.

Chemistry 30/35 IB HL - 8 credits (full year)
Prerequisite: Chemistry 20 IB HL
This rigorous course, combined with Chemistry 20 IB, is equivalent to the first year of university chemistry. Topics covered include energetics, reaction kinetics, equilibrium systems, acid/base chemistry, organic chemistry, oxidation-reduction systems, and periodicity. Two optional units (selected by the teacher) are also covered. The year ends with an IB exam in May and the Alberta Diploma Exam in June; Chemistry 30 credits are earned upon successful completion of the course. An internal assessment laboratory experiment is designed, implemented, and analysed by each student.

Computing Science 30 IB HL - 10 credits
Prerequisites: IB Computing Science 20A/B and enrollment as an IB Higher Level Computing Science Candidate
Computer Science 30 IB is a rigorous, university-level course that builds on the skills developed in IB11/CS20. Students deepen their Java programming abilities through advanced work with data structures, the Java collections framework, and the creation of custom structure classes. The course emphasizes algorithmic efficiency, effective data access, GUI development, file handling, and the design of more complex and optimized programs. A major software project allows students to synthesize their skills and strengthen their project-management abilities.

Students also study the full range of IB Computer Science concepts. Paper 1 covers hardware, data representation, operating systems, networking and security, databases, and the fundamentals of machine learning with ethical considerations. Paper 2 extends students' computational thinking, programming constructs, data structures, object-oriented design, and abstract data types. The required annual case study is integrated directly into Paper 1.

Throughout the course, students work on their Internal Assessment, an individual software solution to a real-world problem, and prepare for their final IB Computer Science examinations. The course equips students with advanced problem-solving abilities, strong theoretical understanding, and the programming skills needed for future study in computing and technology.

Economics 30 IB HL (comprised of Macro Economics and International/Developmental Economics) – 8 credits (full year)
Prerequisite: Economics 20 IB HL
This course continues with the content described in the grade 11 course offering.

English 30/35 IB HL - 10 credits (full year)
Prerequisite: English 20 IB HL
This program is a continuation of English 20 IB and is designed to further develop student awareness of and appreciation for writers' craft. Students will further develop a literary perspective by studying literature from different cultures, and time frames. The IB Areas of Exploration include Readers, Writers and Texts; Time and Space; and Intertextuality: Connecting Texts. In order to meet the expectations of the IB program, in addition to regular course work, students will complete an oral assessment and a self-directed HL essay in order to meet expectations of the IB program. The IB exams consist of two Guided Literary Analyses and a comparative essay. In addition, they will be responsible for writing the Alberta Diploma exams by the end of the course. Pre-reading, research and text annotation and text purchase is required and assigned prior to the beginning of the course.

Mathematics 35 IB HL - Analysis and Approaches - 3 credits
Prerequisite: Mathematics 30-1/31 IB HL
Students will focus on the study of vectors and planes, advanced topics in statistics and probability, complex numbers and differential calculus

Psychology 30IB SL- 5 credits
No prerequisites required
This course continues with the content described in the grade 11 course offering.

World History IB/Social Studies 30-1 IB HL - 8 credits (full year)
Prerequisite: Social Studies 20 IB
This course provides a detailed outline survey of modern 20th century world history from 1900's to the present era. Emphasis is placed upon the study of major historical themes, document analysis, research procedures and class discussions. Our region of study is The Americas. Topics covered include events from the Great Depression to the end of the Cold War.

International Languages – ab initio Level

French 30 IB ab initio – 5 credits
Prerequisite: French 20 IB ab initio
Based on the French 30 curriculum of Alberta Education and the language IB ab initio curriculum, this course prepares students for the French 30 IB ab initio oral, reading comprehension and written exams through the expansion of the ab initio themes. Students will engage in more advanced enriched activities in terms of scope and depth, frequency, and richness of expression.

Spanish 30 IB ab initio – 5 credits
Prerequisite: Spanish 20 IB ab initio
Based on the Spanish 30 Language and Culture curriculum of Alberta Education and the language IB ab initio curriculum, this course prepares students for the Spanish 30 IB ab initio oral, reading comprehension and written exams. Students will further explore the five ab initio themes and enhance their understanding of the Hispanic community.

International Languages – B Standard Level

French 31 IB SL – 5 credits
Prerequisite: French 30 IB SL
This course is designed to expand proficiency in all four primary skill areas of listening, speaking, reading comprehension and writing. Students will cover the regular French 31 curriculum of Alberta Education and IB language SL curriculum. They will continue to practice using language in practical and social situations, but will also cover more expressive and intellectual domains. They will be able to give and defend their opinions on controversial issues. Emphasis is placed on consolidation of grammatical structures to enhance written composition using a variety of formats, such as journals, blogs, editorials, personal and formal letters.

Sir Winston Churchill High School — International Baccalaureate Course Sequencing

Updated October 2025

SL – Standard Level
HL – Higher Level

IBO Subjects	Grade 10 — 1st Semester	Grade 10 — 2nd Semester	Grade 11 — 1st Semester	Grade 11 — 2nd Semester	Grade 11	Grade 12 — 1st Semester	Grade 12 — 2nd Semester	Grade 12
	Students apply for IB in November and must have prerequisites.							
Math SL	Math 10 Cohort IB	Math 20 IB	Math 30/31IB SL (Full Year)		Exam Fee			
Math HL	Math 10 Cohort IB	Math 20 IB	Math 30/31IB HL (Full Year)				Math 35 IB HL	Exam Fee
Biology SL	Science 10 Math 10C or cohort IB	Bio 20 IB (sem 2)	Biology 25/30 IB SL (Full Year)		Exam Fee			
Physics SL	Science 10 (sem 1) Math 10 Cohort IB (semester 1)	Physics 20 IB (sem 2)	Physics 25/30 IB SL (Full Year)		Exam Fee			
Business Management SL	Financial Mgt. Intro. (recommended, not req)	BM Intro IB (term 4)	Business & Management Advanced IB SL (Full Year)		Exam Fee			
Psychology SL	*no prerequisite*			Psych 20IB SL		Psych 30IB SL		Exam Fee
Economics HL	*no prerequisite*		Economics 20IB HL			Economics 30IB HL (Full Year)		Exam Fee
Chemistry HL	Science 10 (either semester) Math 10 Cohort IB (first semester)		Chemistry 20 IB SL (Semester 1)			Chemistry 30/35 IB HL (Full Year)		Exam Fee
World History HL	Social Studies 10-1 (either semester)		Social 20 IB HL (semester 1)			World History IB HL (Full Year)		Exam Fee
English Literature HL	English 10-1 (either semester)			English 20 IB HL (semester 2)	text purchases both years	English 30/35 IB HL (Full Year)		Exam Fee
French B - ab initio	French 10 (either semester)			French *ab initio* 20IB		French *ab initio* 30IB		Exam Fee
French B SL	French 20 (either semester) or French Immersion			French 30 IB SL		French 31 IB SL		Exam Fee
Spanish B ab-initio	Spanish 10 (either semester)			Spanish *ab initio* 20IB		Spanish *ab initio* 30IB		Exam Fee
Mandarin B ab initio	Classes are completed at **The Chinese Academy** (Diefenbaker campus) on Saturdays - Academy has additional fees - Students apply for IB course - IB Registration & Final Exam at SWC - Chinese 10 H recommended		*Mandarin ab-initio 20 IB (Completed Off-Campus - Full Year)*			*Mandarin ab-initio 30 IB (Completed Off-Campus - Full Year)*		Exam Fee
Mandarin B SL			*Mandarin 20 IB SL (Completed Off-Campus - Full Year)*			*Mandarin 30 IB SL (Completed Off-Campus - Full Year)*		Exam Fee
Cantonese B SL			*Cantonese B 20 IB SL (Completed Off-Campus - Full Year)*			*Cantonese 30 IB SL (Completed Off-Campus - Full Year)*		Exam Fee
Visual Arts HL	Art 10 (either semester)		Art 20 IB & Art 30 IB HL (Full Year)		Supply Fee	Art 31 IB HL		Exam Fee & Supply Fee
Computer Science HL	Computing Science 10 (term course)		Computing Sci. 20	(either semester)		Computing Science 30IB HL (full year)		Exam Fee
Theory of Knowledge			All partial IB students complete TOK in a term course. Diploma students – blended morning and online course in tutorial throughout the year.			Diploma Students: TOK within all IB courses this year with a few after school sessions to prepare for the Essay.		

Current Fees for 2026-27: Exam/Subject Fee - $220 charged in the year the student is registered to write an IB exam. CBE IB Registration Fee $30/year

There are scheduling conflicts with the following subjects that are concurrent. You can only choose one between them:

- Biology or Physics or Business
- World History or Economics
- Math HL or Psych SL (may not be an issue, depending on Psych enrollment)
- Chemistry HL or Computer Science HL (may not be an issue, depending on Chemistry enrollment)
- Art or French or Spanish

Diploma Program (also known as full & full diploma)			**Course Program** (also known as partial, certificate or diploma course)
Diploma IB consists of: • 6 courses with at least one from each area 1-5, 3 HL/3 SL, or 4 HL/2 SL • Theory of Knowledge • Extended Essay • CAS Hours (150 hr suggested.)			
1	Studies in Language and Literature	• English A: Literature HL	
2	Language Acquisition (compulsory – choose one) If you take Mandarin or Cantonese ab initio or SL, classes are at the Chinese Academy and the IB exam will be at SWC in grade 12.	• French SL, ab-initio SL • Spanish ab-inito SL • Mandarin SL, ab-inito SL • Cantonese SL	**Course IB consists of:** • a minimum two courses • Theory of Knowledge (3 credit course in gr. 11) • CAS (~75 hours over 2 years)
3	Individuals and Societies If you choose Econ instead of WH, you will have to take SS 20 & 30 in Summer school in order to graduate high school.	• World History HL **OR** Econ HL • Business Management SL	
4	Sciences If you choose CS instead of Chem, you will have to take Chem 20 & 30 in Summer school to meet university application requirements. You are responsible to research this.	• Biology SL **OR** Physics SL • Chemistry HL **OR** Computer Science HL	
5	Mathematics	• SL or HL or Further	
Theory of Knowledge (compulsory, outside timetable)			
Extended Essay (compulsory, outside timetable)			
CAS (suggested ~150 Hours) – compulsory (Creativity, Activity, Service)			

IB exams are written in May during grades 11 and/or 12.

COMPLEMENTARY COURSES

CAREER AND LIFE MANAGEMENT (CALM)

CALM 20 (Career and Life Management) - 3 credits
Required for High School graduation
The aim of senior high school Career and Life Management (CALM) is to enable students to make well-informed, considered decisions and choices in all aspects of their lives and to develop behaviors and attitudes that contribute to the well-being and respect of self and others, now and in the future. CALM is the core course for health literacy at the senior high school level in Alberta. Emphasis is placed on individual decision making and goal setting throughout the CALM course.

CALM provides students with opportunities to develop and shape their lives occupationally, financially, and socially. The curriculum is organized into three major units: Personal Choices, Resource Choices, & Career and Life Choices. In addition, the course will contain one optional subject, Human Sexuality.

INTERNATIONAL LANGUAGES

Learning a language empowers you to think, act and speak in diverse cultural settings and to move from one cultural setting to another with confidence. More than one language can be studied at the same time. Students at any grade level may begin and continue studying a language.

WHY LEARN ANOTHER LANGUAGE?

- The ability to communicate in many languages is valuable.
- Knowing other languages will help you to make connection in other fields such as literature, art, business, technology, mathematics and sciences.
- Studying languages develops well-rounded individuals who can think critically and relate to the world around them.
- Studying languages to the 30-level, may allow a student to replace a Math 30 or Social Studies 30 mark with the language 30 mark. (Check the requirements with each post-secondary institution directly.)
- To be awarded opportunities to travel, work, study in a variety of countries and cultures during the summer.

SIR WINSTON CHURCHILL HIGH SCHOOL OFFERS THE FOLLOWING LANGUAGES:

- Chinese
- French
- Spanish

NOTE: These languages are considered to be **academic subjects** and are used in calculating the academic average for scholarships and for entrance to many programs at the post-secondary level. Students are reminded that they are able to **enroll in more than one international language** during their high school career.

OTHER LANGUAGE OPPORTUNITIES SIR WINSTON CHURCHIL OFFERS:

- Possible exchange opportunities offered to:
  - Spain / Mexico (through Alberta Learning – in-person and/or virtual)
  - Macau (receiving Alberta Education credits and taught in English)
  - Quebec (through Alberta Learning – virtual only)

- Summer job immersion programs in Quebec (through the YMCA)

SIR WINSTON CHURCHILL IB LANGUAGE PROGRAMS:

- Chinese (off campus)
- French
- Spanish

NOTE: See the IB section of this course guide. Students who choose to study an IB Language must complete any CAS and T.O.K. requirements.

CHALLENGE EXAMS

Students wishing to challenge language courses offered by Calgary Board of Education and/or the Calgary Catholic School Board **must contact the Learning Leader of International Languages for information on the procedures to follow.** The challenge exam assesses all four aspects of language: speaking, listening, reading, and writing.

The challenge exam process has now become a centralized process that occurs off-campus and is facilitated by the Calgary Board of Education.

Students wishing to challenge a language exam should take into consideration that currently, several post-secondary institutions are no longer accepting challenge exam-based marks as a possible grade for application.

CHINESE

Background	Grade 10	Grade 11	Grade 12
No Chinese or very little	Chinese 10	Chinese 20	Chinese 30
3 years of Junior High Chinese (Chinese 6Y) or family background in Chinese	Chinese 20 / Chinese 30 (these courses can be taken during grade 10, 11, or 12)		
9 years of Chinese (Chinese 9Y)	Chinese 30 (this course can be taken during grade 10, 11, or 12)		

NOTE: If students have previous experience with Chinese, please make an appointment with the Chinese teacher at the beginning of the school year, **before** classes commence, to determine which class is most appropriate.

Chinese 10 Language and Culture – 5 Credits
This beginner level course is for students who have no background in Mandarin Chinese (or a very limited background). All four areas of language learning (listening, speaking, reading and writing) will be developed, explored, and assessed to provide students with basic communication skills. They will learn to read and write Mandarin Chinese using simplified or traditional characters. They will also learn many aspects of Chinese culture.

Chinese 20 Language and Culture – 5 Credits
Prerequisite: Chinese 10 or students who have had Chinese as a second language instruction at the junior high level for grade 7, 8, and 9 or those who have a family connection to the culture and minimal knowledge of Chinese language.
This course is for students who want to continue developing their language fluency and global understanding of Chinese culture.

Chinese 30 Language and Culture – 5 Credits
Prerequisite: Chinese 20 or students who have had Chinese as a second language instruction at the elementary and junior high level for grades 1 to 9.
In this course students will continue developing their language competencies so that they will be able to use Mandarin to communicate outside the classroom.

Chinese IB
NOTE: Cantonese IB and Mandarin IB are offered at The Chinese Academy, a Friday/Saturday Chinese school in partnership with the Calgary Board of Education.

FRENCH

<table>
<tr><th>Background</th><th>Grade 10</th><th>Grade 11</th><th>Grade 12</th></tr>
<tr><td rowspan="2">No French or very little</td><td rowspan="2">French 10</td><td>French 20</td><td>French 30</td></tr>
<tr><td>French 20 IB
ab initio</td><td>French 30 IB
ab initio</td></tr>
<tr><td rowspan="2">• 3 years Jr. High
70% average
*please verify component list provided
• French 10-9Y</td><td rowspan="2">French 20
(see list
below)</td><td colspan="2">French 30</td></tr>
<tr><td>French 30 IB</td><td>French 31 IB</td></tr>
<tr><td rowspan="2">Immersion program*</td><td colspan="3">French 30</td></tr>
<tr><td></td><td>French 30 IB</td><td>French 31 IB</td></tr>
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*Immersion program students may opt to take French 20 or 30 in their grade 10 year.

French 10 – 5 Credits

French 10 is a beginner level course. In this course students will participate in various speaking, reading, and writing activities that cover a variety of topics and themes. French 10 students will have the opportunity to learn about cultural aspects of the French language and develop strategies to approach language learning.

French 20 – 5 Credits

Prerequisite: French 10 or Grades 7, 8 and 9 French with a 70% average (3s or 4s – Junior High)

French 20 continues to develop language skills in the four language areas. The final grade at the end of French 20 will determine whether credits are granted in French 10 and/or 20. Students will learn more about cultural aspects of the French language and further develop language learning strategies.

A student is ready for French 20 if the following **basic vocabulary, skills, and grammatical** concepts **can be used independently, confidently, and accurately in speaking, listening, reading, and writing:**

- verb conjugations:
  - avoir, être, faire
  - common -er, -ir, -re verbs (regarder, chercher, choisir, finir, vendre, attendre, etc.)
  - auxiliairy verbs: vouloir, pouvoir, devoir, aller, aimer, préférer + infinitive
  - aller + infinitive
- common adverbs
  - toujours
  - souvent
  - etc.
- coordinate conjunctions : et, mais, ou, parce que, aussi
- stress pronouns (moi, toi, lui, eux, elles)
- Vocabulary for : date, time, weather, colours, clothing, and daily activities
- possessive adjectives (mon, ma, mes, ton, ta, tes, etc.)
- question formats
  - Est-ce que . . .
  - Question format with question words, such as: quand, comment, où, quel(s), quelle(s), (avec) qui, etc.
- articles, demonstrative adjectives, interrogative adjectives
  - un, une, des
  - le, la, les
  - du, de la, des
  - ce, cet, cette, ces
  - quel, quelle, quels, quelles
- negative and placement of negative with one and two verbs (ne. . . pas)

French 30 – 5 Credits
Prerequisite: French 20 ***OR*** *Grade 9 French Immersion*
This intermediate level course is for students who have successfully completed French 20 or have graduated from the Grade 9 French Language Immersion Program. Students will participate in various listening, speaking, reading, and writing activities to improve their communication skills in French. In addition, students will have the opportunity to learn more about French-speaking cultures throughout the world, and to further develop their language learning strategies.

French IB
NOTE: See IB section for French IB course information.

SPANISH

Background	Grade 10	Grade 11	Grade 12
No Spanish or very little	Spanish 10 →	Spanish 20	Spanish 30
	→	Spanish 20 IB ab initio	Spanish 30 IB ab initio

NOTE: If students have previous experience with Spanish, please make an appointment with the Spanish teacher at the beginning of the school year, **before** classes commence, to determine which course level is most appropriate.

Spanish 10 Language and Culture – 5 Credits
This is a beginner level course with emphasis on reading, writing, speaking and listening through a variety of activities. Emphasis is placed on discovering the influence and impact of Spanish and its culture around the world. Upon completion of this course students will gain a preliminary acquisition of skill sets for Spanish.

*Successful completion of this course will make students eligible to participate in **virtual exchanges** and a **10 week exchange trip** to Spain during the Grade 11 year.*

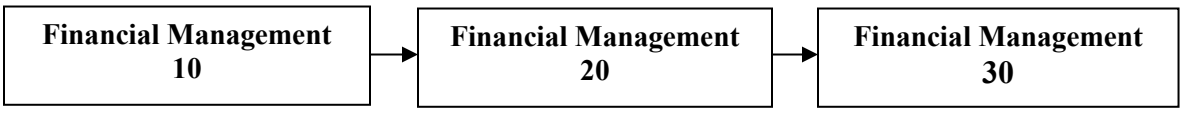
Spanish 20 Language and Culture – 5 Credits
Prerequisite: Spanish 10
This intermediate course focuses on developing and expanding one's knowledge of Spanish using a variety of thematic materials and activities. Practical use of Spanish is emphasized through reading, writing, speaking and listening, and using Spanish in the community.

Spanish 30 Language and Culture – 5 Credits
Prerequisite: Spanish 20
Spanish 30 incorporates a less structured manner of learning with emphasis on the students' abilities to express themselves naturally and freely. By the end of the course students will have a very solid, practical base in communicating in the language and understanding the culture.

Spanish IB
NOTE: See IB section for Spanish IB course information.

BUSINESS ADMINISTRATION, FINANCE

FINANCIAL MANAGEMENT



Financial Management 10 - 3 credits
The introductory level course will give students some experience in the mechanics of the accounting cycle. They will be introduced to the step-by-step preparation of simple sets of accounting records in a service business. This includes the preparation of journals, ledgers, and simple financial statements. This course will assist students if they take accounting in post-secondary institutions.

Financial Management 20 - 3 credits
Prerequisite: Financial Management 10
Students will be introduced to step-by-step preparation of accounting records for a merchandising business. This includes the preparation of journals, ledgers, and simple financial statements. Incorporated through the course will be the opportunity to learn and use computer software to discover how this software may be used effectively to assist in the creation of accounting records. Students will also learn how to analyze and fully prepare tax returns that will help them complete basic personal tax returns and assessments in real life.

Financial Management 30 - 3 credits
Prerequisite: FIN2030 and FIN3040
Financial Management 30 allows students to take prior accounting knowledge and apply those skills in real world situations. Students will examine the content and structure of financial statements; prepare statements for different types of businesses as well as using formulas and ratios to evaluate the financial standing of the organizations. Students will also gain information on the stock market, equities and mutual funds through assignments and a mock stock market game.

MARKETING & MANAGEMENT

Marketing & Management 30

Marketing & Management 30 - 3 credits
This is the class to learn about what it takes to be a business person. A great introduction if you have an interest in joining the business world right away and very valuable if you intend to take business at the post-secondary level.

Students learn about effective selling strategies that are used to inform potential customers about products and services available in the marketplace, as well as techniques for successful selling.

Students will also have the opportunity to look at organizational structures, management theories and organizations as working units. The manner in which business decisions are made within the community, provincially, nationally and globally will be examined.

DIGITAL FUTURES PATHWAY

BROADCASTING AND PODCASTING COURSE OVERVIEW

This course invites students to discover the exciting world of broadcasting, cinematography, and podcasting through hands-on, collaborative assignments. Students will design, create, record, and edit storytelling projects that highlight their personal interests and passions. Students will develop critical thinking, creative problem-solving, and technical skills in audio and video pre/post-production, building toward increasingly complex and innovative projects.

Broadcasting and Podcasting 15: Introduction - 3 credits
This course offers an introduction to careers in audio and visual communication technologies, where students will learn to create and share engaging content through simulated television and podcasting platforms.

Students will focus on visual composition, media, and audio/video production, honing their ability to communicate messages effectively. They will explore the societal impact of media and analyze various formats, including talk shows, podcasts, news broadcasts, music videos, and radio, to understand how ideas and information are conveyed. Students will develop an understanding of copyright restrictions and permissions and apply these principles to their projects.

Students will take on pre- and post-production roles, culminating in the creation of an audio and/or video work. They will learn the importance of crafting a clear message, tailoring content to a specific audience, and critiquing and evaluating projects. Additionally, students will demonstrate fundamental audio/video skills such as narration, interviews, music integration, transitions, effects, camera movements, shot types, and screen aspect ratios. Projects will involve scripting, sound recording, and basic lighting techniques, ensuring a comprehensive introduction to media production.

Broadcasting and Podcasting 25: Intermediate - 5 credits
Prerequisite: Broadcasting and Podcasting Intro
In this intermediate course, students will deepen their understanding of the critical role of pre-production in the audio and video process while advancing their technical skills. They will examine the value and necessity of thorough planning and explore strategies for developing audio and/or video projects using various techniques. Students will describe and apply pre-production methods such as storyboarding, scripting, shot lists, and flowcharts, ensuring their projects include clear structure, appropriate length, and alignment with audience needs.
Students will work hands-on with cameras, lenses, lighting, microphones, and post-production editing software and equipment, enhancing their ability to produce high-quality media content. Through a structured planning process, they will progress through steps like topic selection, research, medium/format justification, content development, and revisions based on feedback. Additionally, students will analyze planning principles for multiple media formats and create comprehensive pre-production plans. By building on their foundational skills, students will gain the confidence to create polished, professional-quality audio and/or visual works.

Broadcasting and Podcasting 35: Advanced - 5 credits
Prerequisite: Broadcasting and Podcasting Intermediate
In the advanced course, students will refine their expertise in broadcasting, cinematography, and podcasting through complex, professional-level projects. Building foundational and intermediate skills, students will apply advanced techniques in camera operation, lens selection, lighting design, audio recording with professional-grade microphones, and post-production editing using industry-standard software and equipment.

Students will manage and analyze the components, goals, and challenges of pre-production, applying appropriate knowledge and skills to develop specific production plans. They will complete detailed plans for at least one of the following projects: public service announcements, commercials, news stories, short documentaries, action events, music videos, radio plays, live recordings, or screenplays. In post-production, students will apply advanced editing techniques, including the integration of transitions, to produce polished audio and video projects based on prepared storyboards and production plans.

As part of a broadcast team, students will create and produce a series of 5-to-10-minute broadcasts, with each team developing production plans that clearly outline tasks and responsibilities. To showcase their work, students will present a selection of completed projects, including plans, shot lists, storyboards, and broadcasts, to an audience. Students will oversee projects from post-production to completion, managing time, resources, files, and equipment effectively. Final projects will be exported in appropriate formats, such as digital video (DV) or common internet video standards, and will feature enhanced production elements such as lighting, sound, and special effects.

COMPUTING SCIENCE

Unleash the power of your mind, harness the power of technology
Computer Science is the study of how technology works and how it shapes the world around us. It's a dynamic and rapidly growing field that combines creativity, problem-solving, and logic to develop innovative solutions. From designing software and building apps to exploring cutting-edge fields like Artificial Intelligence and Machine Learning, Computer Science is at the heart of the technology that drives our modern world.

In Computer Science, you'll learn how to program, analyze data, and understand the hardware and software that power computers. Whether it's creating a game, designing an algorithm, or building systems that solve real-world problems, Computer Science gives you the tools to innovate and lead in a tech-driven future.

This pathway offers opportunities to develop skills that are highly valued by universities and employers, such as critical thinking, adaptability, and collaboration. Whether you're interested in coding, robotics, cybersecurity, or AI, Computer Science opens doors to a wide range of exciting careers in technology and beyond. Join the pathway and become a creator of tomorrow's technology!

Is Computer Science for You?

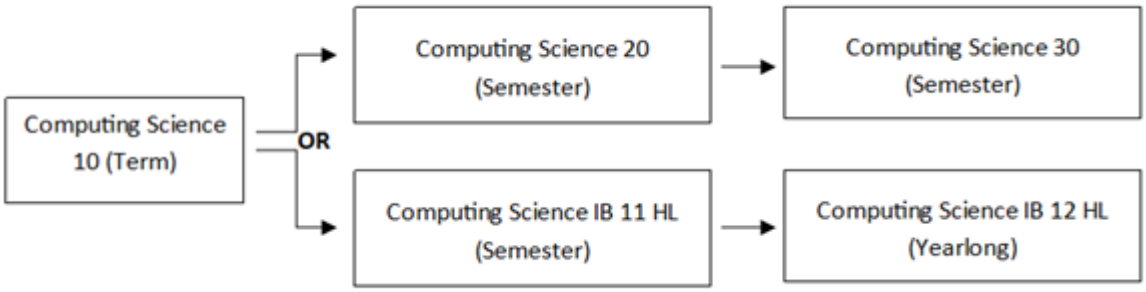
- Do you enjoy exploring technology and discovering how it works?
- Are you curious and driven to ask questions like, "How can I improve this?"
- Do you have the confidence to experiment with your ideas and test solutions?
- Are you eager to learn exciting programming languages and use them to create innovative solutions?
- Are you eager to keep learning and expanding your knowledge in a rapidly evolving field?
- Do you enjoy tackling challenges and finding creative, unique ways to solve problems?

By taking Computer Science courses at Churchill, you'll sharpen your problem-solving skills and gain a deeper understanding of the technology that powers our world. This program is truly multidisciplinary, encouraging you to connect concepts from other subjects and everyday experiences.

You'll have the chance to unleash your creativity while enhancing critical thinking skills. In addition, you'll develop highly sought-after abilities valued by post-secondary institutions and employers alike, including adapting to new technologies, embracing innovative work patterns, thinking creatively, and driving innovation.

Become part of a thriving program that equips you with the skills and knowledge to shape the future of technology and unlock endless possibilities!

Course Pathway



Computing Science 10 - 3 credits
Launch into an exciting introduction to Computer Science in this beginner-friendly course. Students will explore learning about hardware, software, algorithms as problem-solving tools, and the role of programming in implementing them. This course includes various engaging topics such as Computer Architecture, Artificial Intelligence, and how these technologies shape the modern world. A range of hardware and software technologies will be utilized to provide hands-on learning experiences. Building on this foundation, students' progress through Structured Programming 1 and 2, starting with simple programs that input, process, and output data, and advancing to incorporate decisions (selection), loops (iteration), and modularity. No prior experience is needed—just enthusiasm to explore, create, and problem-solve! This course is a required prerequisite for IB Computer Science and for those continuing into Computer Science 20 and 30.

Computing Science 20 - 5 credits
Prerequisite: Computing Science 10
Building on the Python foundations from Computer Science 10, students will be guided in transferring those skills to Java, starting the course with a focus on adapting and applying their programming knowledge to a new language. Using Java, students will tackle real-world problems by organizing information in ways that reflect everyday complexities. They will enhance their understanding of decisions and loops, explore Java graphics libraries, and use arrays to manage lists of information. In the next part of the course, students will dive into Files and File Handling, mastering how to read, write, and manipulate data. They will also cover Data Structures to efficiently store and process information, progressing from Procedural Programming to an introduction to Object-Oriented Programming (OOP) with a focus on Encapsulation. Students will plan each of their tasks by designing algorithms to outline the problem's needs and strategize their approach. After programming, they will test and compare the program's outcomes to the original algorithm, making modifications as needed to ensure accuracy and efficiency. The course concludes with a summative final project where students showcase their Java programming skills in a comprehensive and creative way.

Computing Science 30 - 5 credits

Prerequisite: Computing Science 20

This advanced course challenges students to refine their programming skills and deepen their understanding of computer science. The journey begins with Iterative Algorithms, where students learn to efficiently search, sort, and merge data. They then progress to Recursive Algorithms, applying this method to create programs for tasks such as recursive binary search, quicksort, and merge sort. Next, students advance to Object-Oriented Programming 2, exploring inheritance and interfaces to develop modular, efficient, and reusable code. The course concludes with the combined Computer Science 2 and CSE Project D modules, where students apply advanced programming techniques while exploring the connection between binary and hexadecimal systems, logic gates, and computer architecture. These modules also emphasize the societal impact of computing and provide students with the opportunity to showcase their skills through a comprehensive capstone-style final project that integrates all they have learned.

DESIGN STUDIES

Design Studies Intro - 3 credits
Students develop an understanding of design problems through research and select, generate and evaluate possible solutions. Students develop basic knowledge and skills in computer-aided design (CAD). The course involves basic design sketching for architectural floor planning. Students create their own real world simulated products using solid part modeling software from Autodesk. In addition to Industrial product design students will spend time building houses in Revit Architecture by Autodesk. 3D printing is introduced with student designs printed in class using Autodesk Inventor software. Students also create a 3D model of a bungalow house from their earlier floor plan using Autodesk Revit architectural software.

Design Studies Inter - 3 credits
Prerequisite: Design Studies Intro
Students are given a design brief and the opportunity to enter the Calgary Home Builders design competition. Students plot their work on a large format printer and create poster-boards from their architectural plans to enter in the city-wide competition. Study architectural design dealing with residential construction techniques and their representation on drawings using Autodesk Revit architectural software. Students have a choice to further explore industrial design concepts by creating solid part models using Autodesk Inventor software. Students create parts, assemblies and digital prototypes simulating real world products. OR take a module introducing 3d Animation concepts using 3ds Max software by Autodesk.

Design Studies Adv - 3 credits
Prerequisite: Design Studies Inter
Students create their own design brief for an architecture project of their choice, producing a set of working drawings for an architectural structure using Autodesk Revit Software. Students will be given the opportunity to produce working drawings and media to add to their design portfolio. Students may continue working with solid part assemblies in Autodesk Inventor and animation using Autodesk 3ds Max. Students concentrate on various drawing and computer drawing types to illustrate design concepts and solutions. From a design brief students will deal with such aspects as shaping, massing, proportion, scale, contrast, colour, texture and finish within the context of complex three-dimensional design projects. A variety of software programs from the Design Academy Suite will be used including 3ds Max for animation and architecture visualization projects, Inventor for solid part assembly modeling and Revit for architecture design problems.

ELECTRO-TECHNOLOGIES

Approximately 80% percent of class time will be spent on practical lab work, exercises, and building projects. The remaining 20% will be spent on theory.

Electro-Technologies Intro – 3 credits
Jump into the world of electronics with this hands-on, beginner-friendly course! You'll learn how to solder, explore a variety of real electronic components, and discover how everyday circuits work. Using DC power sources and a multimeter, you'll measure voltages and resistances just like a technician. You will also master breadboarding techniques as you build multiple circuits to sharpen your skills. Then you will virtually connect with a robot and learn to program it using RobotC. Once you've got the basics, you'll take on challenges that put your robot-programming abilities to the test. To wrap things up, you'll build your very own electronic project—**a working strobe light that you get to keep!**

Electro-Technologies Inter - 3 credits
Prerequisite: Electro-Technologies Intro
Get ready to step deeper into the world of digital electronics! In this course, you'll uncover the building blocks of digital systems by experimenting with logic gates, constructing circuits, and running simulations in Electronic Workbench. You will take on a hands-on tech challenge: fully disassemble a working computer (the easy part!) and then put it back together to confirm it still runs (the satisfying part!). Using the VEX robotics platform, you'll identify components, interface with sensors and motors, and design small-scale robots that respond to your programming. Through a mix of construction techniques and programming strategies, you'll tweak and tune your robot to take on a variety of tasks. Two in-class tournaments will put your robot-building skills—and your competitive edge—to the test! Finally, you'll finish the course by creating your own digital electronics project—a **Digital Siren you get to keep!**

Electro-Technologies Adv - 3 credits
Prerequisite: Electro-Technologies Inter
In this advanced electronics course, you'll dive deeper into the world of circuits, tech, and hands-on experimentation. You'll get to explore and control real electrical components—capacitors, transformers, oscilloscopes, ohmmeters, and more—just like an engineer would. In the lab, you'll build rectifier circuits and discover how easily AC power can be converted into DC. Even better, you'll *see* voltage and current come to life on digital oscilloscope screens, giving you a true, practical understanding of how electricity works. If you're thinking about engineering or tech in post-secondary, this course is the perfect launchpad. Using the Arduino Uno platform, you'll breadboard circuits and use C++ programming to bring them to life and customize how they behave. By the end of the course, you'll design and build your own fully functioning stereo system, which you get to keep.

GRAPHIC DESIGN

Graphic Design Intro- 3 credits
Turn simple snapshots into unique photographs. Using Photoshop, learn to edit and enhance photos from the digital camera for printing, illustration and for the Web. Create effects that are seen in magazines, on TV, and on the Web. Retouch photos, colour, paint, mask, use adjustment layers and blend modes as well as filters and smart objects to make alterations to the photos. Students will be introduced to the fundamentals of animation, photo editing and graphic manipulation using Adobe software and photo capturing devices. The elements and principles of design for various media will be introduced. Students will use a variety of animation techniques to produce a simple animation; the focus is on basic skills, including planning, keyframing, stage set-up and production, used to create a moving picture. Storyboarding will be used to plan out a final animation project that tells a story.

Students learn the fundamentals of consumer-based digital image acquisition, management, composition, manipulation and editing software to improve image composition using Adobe Photoshop, Adobe Illustrator, Adobe Bridge, Adobe Lightroom and other titles in the Adobe software collection.

Graphic Design Inter - 3 credits
Prerequisite: Graphic Design Intro
In the first module students will further their animation skills by learning how to design their own animations using 2d and 3d animation software for projects such as company and logo advertisements.

Students explore the evolution of various animation styles and techniques (traditional and digital). Students apply planning, idea development and storytelling techniques to create an effective animation. Students will also be introduced to character modeling using Autodesk Mudbox software.

They will have a thorough understanding of animation basics and know how to incorporate sound and interactivity to create engaging animations. In the second module students will work with their teacher to create a multimedia project of their choice.

Students will submit a project proposal and use the tools at their disposal to meet their outcomes. Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

In the final module students will work on various photography and graphic editing projects including movie posters, advertisements and relevant graphic projects in the world today. Students acquire original digital images from a digital camera and extend and refine their knowledge of image-editing software. Students focus on composition principles and more advanced editing techniques to enhance images as well as ways to maintain and organize personal libraries.

Graphic Design Adv- 3 credits
Prerequisite: Graphic Design Inter
Photography and graphic editing focus
Students will learn to use the advanced features of animation and image editing software as well as video editing techniques such using Adobe software tools. Students will create interactive presentations using multiple software titles and tools at their disposal.

This course includes a project module where students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

NETWORKING & CYBERSECURITY

(formerly Cybersecurity and Game Development (Intro, Inter, Adv)

Networking & Cybersecurity Introduction - 3 credits

This hands-on course offers 3 CTS Networking modules which are approved by the University of Calgary for admissions averages. The course is taught in a newly custom built, professionally equipped and configured Digital Futures Collegiate Lab at Sir Winston Churchill High School.

- Course content includes an experiential introduction to PC hardware (X86), Ethernet cabling (Cat5e/6/6a), Ethernet devices (Layer 2 Switches), LAN physical/logical addressing (MAC, IP, Ports), LAN networking (Layer 2 VLAN), Protocol basics (OSI, TCP/IP, RDP), Cybersecurity configurations (Windows Security Policies, Firewall), and Type-2 Virtualization (Windows, Linux).
- Hands-on projects include PC assembly, local area network build, Layer 2 network device configuration, single/dual boot OS Installation & virtualization, Windows local & network security configuration.

This course provides a solid technical introduction necessary for a student interested in the field of Cybersecurity which currently offers the highest financial return in the field of IT.

Networking & Cybersecurity Intermediate - 5 credits

Prerequisite: Networking & Cybersecurity Introduction

This hands-on course offers 5 CTS Networking modules which are approved by the University of Calgary for admission averages. The course is taught in a newly custom built, professionally equipped and configured Digital Futures Collegiate Lab at Sir Winston Churchill High School.

- Course content includes an intermediate hands-on exploration of Ethernet media transmission analysis (Cat5e/6/6a), Ethernet LAN segmentation & Layer 2/3 routing (LAN-STP, WAN-BGP), Layer 2/3 protocols and traffic (ARP, TCP/IP, UDP, RDP), Ethernet device configuration (Cisco Catalyst 1300), Layer 2/3 LAN & VLAN Network configuration, Cybersecurity specific configuration (Local security policies, Firewall, IPsec), Type-1/Type-2 Virtualization (VirtualBox, Hyper-V Core, KVM).
- Hands-on projects include Layer 2/3 Ethernet protocol specific traffic scanning & visualization, Layer 2/3 Cisco Catalyst 1300 Trunk & VLAN configurations, Secure network transmission (TLS) via applications such as local & remote server builds (Apache, MySQL) & a DirectX Game Engine implementation.

This course provides a solid treatment of topics common in the first-year university/college IT related programs with a focus on Cybersecurity.

Networking & Cybersecurity Advanced - 5 credits

Prerequisite: Networking & Cybersecurity Intermediate

This hands-on course offers 5 CTS Networking modules which are approved by the University of Calgary for admission averages. The course is taught in a newly custom built, professionally equipped and configured Digital Futures Collegiate Lab at Sir Winston Churchill High School.

- Course content includes an advanced hands-on exploration of WiFi media transmission analysis (802.11), Ethernet LAN/WAN routing (LAN-STP, WAN-BGP), Remote server Type-1 virtualization (HyperV Core, KVM) and build (Apache, MySQL), Cybersecurity focused os & network configurations (TLS, IPsec, Local policies), physical firewall configurations (pfSense, Netgate).
- Hands-on projects include Web/Database/DHCP/VPN server build, VPN server build and tunnel configuration, Game Development & Transmissions with focus on encryption (TLS).

This course provides a solid treatment of topics common in the first-year university/college IT related programs with a focus on Cybersecurity.

PRE-ENGINEERING

Pre-engineering courses provide an opportunity for students to engage in longer term, increasingly complex, personally relevant, design, innovation and invention projects that require a significant investment in time to design, prototype, iterate, and refine.

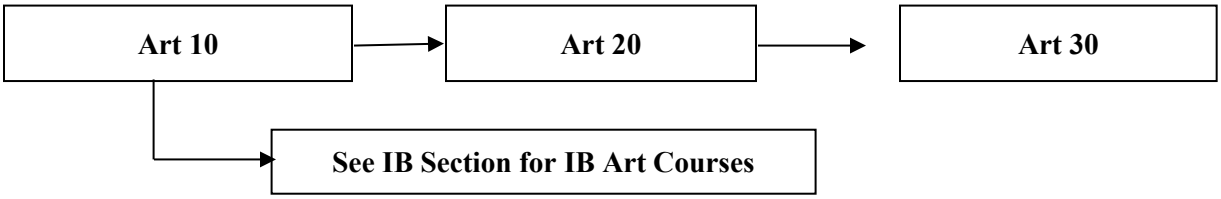
Pre-Engineering Intro - 3 credits
This introductory course empowers students to engage in personal meaningful design, innovation, and invention projects. Students will learn foundational design thinking methodologies and mindsets while exploring interdisciplinary problem-solving. Working collaboratively and utilizing emerging technologies, students will design, prototype, and refine solutions to real-world challenges. This 3-credit course requires immersive, hands-on work, providing the technical and creative foundation for advanced innovation projects. Students will focus on integrating knowledge from distinct disciplines, fostering creative confidence and technical skill development.

Pre-Engineering Intermediate - 5 credits
Prerequisite: Pre-engineering Intro
In this intermediate course, students deepen their ability to tackle complex, interdisciplinary challenges while developing the skills to sense and interact with the world around them. A key component of this level is the introduction to technologies like Arduino microcontrollers, which empower students to create responsive and interactive prototypes. Through hands-on exploration, students will learn to use sensors, actuators, and coding to design innovative solutions that bridge the digital and physical worlds. By integrating knowledge and tools from multiple disciplines, students will refine their technical expertise and creative problem-solving skills. Collaborating with peers and their teacher, students will undertake iterative projects that require advanced prototyping and critical thinking. This 5-credit course involves a dedicated effort, emphasizing adaptability, collaboration, and the use of cutting-edge technology to sense, analyze, and respond to real-world challenges.

Pre-Engineering Advanced - 5 credits
Prerequisite: Pre-engineering Intermediate
The advanced level of this course invites students to lead high-impact, interdisciplinary innovation projects that demand significant expertise and a commitment to excellence. Students will take ownership of the design process, working with mentors and experts to develop sophisticated prototypes and refine their solutions. Through the integration of technical, creative, and analytical skills, students will create deliverables that reflect professional-level quality. This 5-credit course requires immersive effort and fosters leadership, collaboration, and mastery of design thinking principles, preparing students for future studies or careers in innovation and design.

FINE ARTS

ART



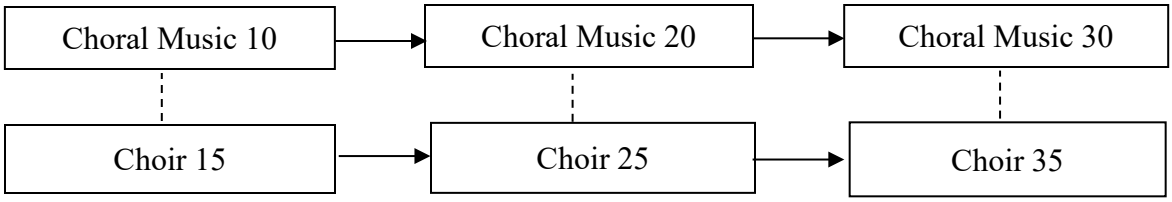
Art 10 - 5 credits
This is a challenging introductory course which gives students the opportunity to develop skills in drawing, painting, colour theory, design, and ceramics. The hands-on projects introduce students to the cultural importance of vocation of Art through the study of significant artists. Junior high study is not a prerequisite for this course. However, students should come to the course with genuine interest in art and a good work ethic.

Art 20 - 5 credits
Prerequisite: Art 10
This is an intermediate course designed to build skills and artistic confidence via project work. Students will be challenged to try a wider range of media in drawing, painting and sculpture. There is also an emphasis on the concepts of style, realism, abstraction, expressionism and Pop Art. Students will be encouraged to bring originality and personal viewpoints to their projects.

Art 30 - 5 credits
Prerequisite: Art 20
This is the senior course in SWC's regular Art program. Students will now have technical skills in a variety of media. They will be introduced to new mixed media techniques and historical pictorial genres. The broad aim is to have students create experimental works spoken with their voice. Similarly, the aim of achieving a personal style is important.

This course also supports the creation of a diverse portfolio for application to post-secondary programs in Art, Design and Architecture. Finally, students have the opportunity to exhibit their best works in the in-school SWC Graduate Art Exhibition in June.

CHORAL MUSIC



Choral Music 10 (Vocals) - 5 credits
No prerequisite
This course designed to build fundamental musical skills with focuses on individual vocal technique. Students have the opportunity to sing independently and in small groups, in diverse musical styles and traditions. A large range of musical ability and experience can be accommodated. Study of technical, theoretical, historical and ensemble aspects of vocal musicianship will be covered. Students enrolled in Choral Music 10 also need to be enrolled in Choir 15 (after school ensemble) for the co-curricular Music Performance-based course for an additional 5-credits. Students in Partial IB or Full IB program who are unable to fit Choral Music 10 into their timetables, should enroll in Choir 15. All other students should register in Choral Music 10 and Choir 15.

Choir 15 (Concert Choir) - 5 credits
No prerequisite; Co-prerequisite: Choral Music 10 (Vocal)
This course allows the vocal student to participate in a performing vocal ensemble. It will be offered two times per week during after school rehearsals outside of the regular timetable for the entire school year. Concert choir and our band ensembles are scheduled in this way to allow the group to perform for the entire school year while receiving five credits. This course requires a commitment to a variety of performing experiences including concerts, workshops, festivals, and music trips, which occur on evenings and weekends. Parents of students in Choir 15 (and Choir 25 and 35) are members of the Sir Winston Churchill Music Parents' Association and volunteer to support the program. Parents are responsible to pay the extra costs associated with Band Trips and Band Festivals. These costs will be outlined at the Annual General Meeting of the SWC Music Parents' Association held every September.

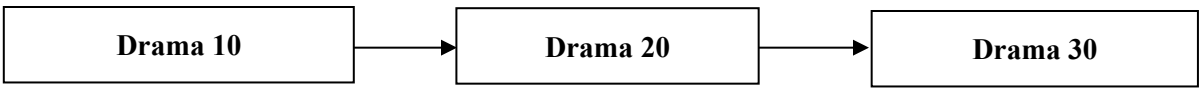
Choral Music 20 - 5 credits
Prerequisite: Choral Music 10
Co-requisite: Choir 25
This course is a continuation of Choral Music 10. This course will be scheduled in the regular timetable except for students that are unable to fit into their timetable because of academics. Students in band are not required to take this course in order to take Choir 25.

Choir 25 - 3 credits
Prerequisite: Choir 15
Co-requisite: Choral Music 20 except for students in band
This course is a continuation of Choir 15. Rehearsals will be held once a week on Tuesday afternoons *outside the regular timetable* for the entire school year. This course requires commitment to a variety of performing experiences including concerts, workshops, and festivals.

Choral Music 30 - 5 credits
Prerequisite: Choral Music 20
Co-requisite: Choir 25
This course is a continuation of Choral Music 20. This course will be scheduled in the regular timetable except for students that are unable to fit into their timetable because of academics. Students in band are not required to take this course in order to take Choir 35.

Choir 35 - 3 credits
Prerequisite: Choir 25
Co-requisite: Choral Music 30 except for students in band
This course is a continuation of Choir 25. Rehearsals will be held once a week on Tuesday afternoons *outside the regular timetable* for the entire school year. This course requires commitment to a variety of performing experiences including concerts, workshops, and festivals.

DRAMA

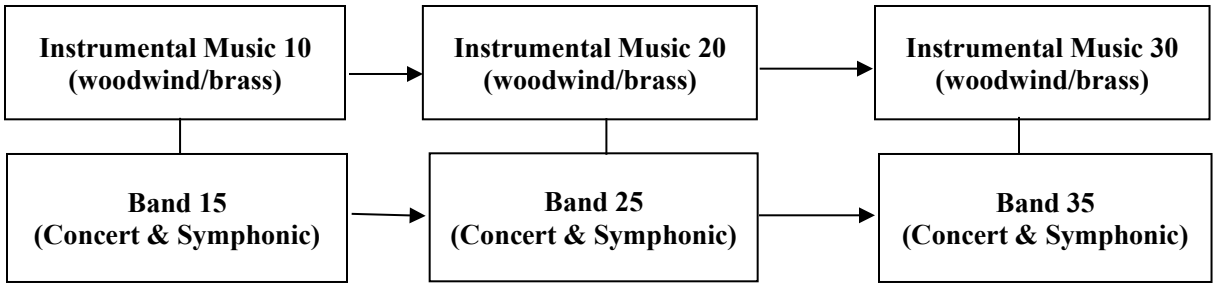


Drama 10 - 5 credits
Students develop communication skills, collaboration and presentation through the dramatic arts. Drama 10 develops both physical and verbal communication while strengthening confidence in self and trust in others. Students will also learn to appreciate drama both as a way of learning and knowing, and as an art form.

Drama 20 - 5 credits
Prerequisite: Drama 10
Drama 20 continues to build communication skills through an understanding of behavior and motivation. Through the study of Scripted Acting and Playwriting students develop the skills of listening and communicating in a more empathetic way. Students in Drama 20 also develop their critical thinking skills as they critically assess their work and the work of others.

Drama 30 - 5 credits
Prerequisite: Drama 20
Drama 30 teaches students the skills and attitudes necessary to make strong, detailed, and creative decisions on their own. Students study Directing and Collective Creation to develop leadership skills. Students apply their learning in several big projects that prepare them for university level studies in any subject area.

MUSIC (Instrumental and Band)



If students do not own their own instruments, rentals are available.

Instrumental Music 10 – 5 Credits
Prerequisite: Previous instrumental experience (school band/private study)
This is an introductory course in high school instrumental music. This course is an instrumental techniques-based course. Study of technical, theoretical, historical and ensemble aspects of instrumental musicianship will be covered. Students enrolled in Instrument Music 10 also need to be enrolled in Band 15 (morning Concert Band) for the co-curricular Music Performance based course for an additional 5 credits. Students in Partial IB or Full IB program that are unable to fit Instrumental Music 10 into their timetables, should enroll in Band 15. All other students should register in Instrumental Music 10.
Sections: *Woodwind – all woodwind instruments*
Brass – all brass instruments,
Percussion/ String Bass (Mixed Level) – all percussion and string bass players

Instrumental Music 20 – 5 Credits
Prerequisite: Instrumental Music 10 or Instrumental Music 10 a.m.
Further development of technical skills and facility on the instrument forms part of this course. This course is an instrumental techniques-based course. Introduction of higher-level theory knowledge and specific historical overviews take place. Students enrolled in Instrumental Music 20 must also co-register in Band 25 (Morning Symphonic Band). Students who are in an IB program or who cannot fit Instrumental Music 20 into their timetable should enroll in Band 25. All other students should be registered in Instrumental Music 20.
Sections: *Woodwind – all woodwind instruments*
Brass – all brass instruments,
Percussion/ String Bass (Mixed Level) – all percussion and string bass players

Instrumental Music 30 – 5 Credits
Prerequisite: Instrumental Music 20 or Instrumental Music 20 a.m.
Continued development of technical skills and facility on the instrument forms part of this course. This course is an instrumental techniques-based course. Developing a greater understanding of tone production, intonation of their instrument and preparation of possible solos or small ensembles will be included. Students will also continue to explore various time periods in music history through specific projects. Students enrolled in Instrumental Music 30 must also co-register in Band 35 (Morning Symphonic Band). Students who are in an IB program or who cannot fit Instrumental Music 30 into their timetable should enroll in Band 35. All other students should be registered in Instrumental Music 30.
Sections: *Woodwind – all woodwind instruments*
Brass – all brass instruments,
Percussion/ String Bass (Mixed Level) – all percussion and string bass players

Band 15 – Concert Band – 5 Credits
Co-requisite: Instrumental Music 10
The Grade 10 Concert Band is the introductory instrumental ensemble at Sir Winston Churchill High School. This course is open to all incoming grade 10 students with previous instrumental music experience. Previous experience should include either involvement in the student's junior high music program or at least one full year of private instruction in music lessons. The Grade 10 Concert Band meets on Mondays and Wednesdays in the AM block.

Band 25 – Symphonic Band – 5 Credits
Prerequisite: Instrumental Music 10 or Instrumental Music 10 a.m.
Co-requisite: Instrumental Music 20
The Symphonic Band is the advanced instrumental ensemble at Sir Winston Churchill High School. This course is open to all students who have completed one year in the Grade 10 Concert Band or at the discretion of the band director. The Symphonic Band meets on Tuesdays and Thursdays in the AM block.

Band 35 – Symphonic Band – 5 Credits
Prerequisite: Instrumental Music 20 or Instrumental Music 20 a.m.
Co-requisite: Instrumental Music 30
The Symphonic Band is the advanced instrumental ensemble at Sir Winston Churchill High School. This course is open to all students who have completed one year in the Symphonic Band or at the discretion of the band director. The Symphonic Band meets on Tuesdays and Thursdays in the a.m. block.

Instrumental Music Jazz 15/25/35 – Jazz Ensemble – 5 Credits
Co-requisite: Enrolment in Instrumental Music Course
The Jazz Ensemble is a performance-based instrumental ensemble open to grade 10-12 students. Students meet twice a week in the PM block (Monday and Wednesday) and perform multiple times throughout the year for school-wide events, local concerts and festivals. This ensemble focuses on technique, style, groove, and improvement.

MUSICAL THEATRE

Musical Theatre 15 - 5 credits
Musical Theatre is designed for students who wish to explore their talents in the disciplines of acting, dancing and singing with a strong emphasis on rehearsal techniques and theatre etiquette. Students will be introduced to a variety of musical styles from the 1920's to current Broadway hits.

Musical Theatre 25 - 5 credits
Prerequisite: Musical Theatre 15
In the second year of musical theatre, students will continue developing and refining their acting, dancing and singing skills. They will continue working with professionals and will also begin to develop their own style. Directing skills are started, and students will be expected to perform small projects that are self-initiated. The course culminates with a public performance, created entirely by the students.

Musical Theatre 35 - 5 credits
Prerequisite: Musical Theatre 25
In the final year of musical theatre students will develop and direct their own projects that will be presented to the school. In addition, resume and audition workshops will be explored. Students will be expected to perform in school productions as well as to continue to develop their singing, dancing, and acting skills. The course culminates with a public performance created entirely by the students. Musical Theatre 35 students act as directors for scripted musical numbers and/or productions.

TECHNICAL THEATRE

Technical Theatre 15 - 3 credits
In this course students will work with set design, set construction, lighting, costume, stage management, etc. When possible, they will work with the current school production.

Technical Theatre 25 - 3 credits
Prerequisite: Technical Theatre 15
Technical students at this level will be expected to work in two more areas in technical theatre, and to control a real project for the school play or some other production.

Technical Theatre 35 - 3 credits
Prerequisite: Technical Theatre 25
Students at this level are expected to take a leadership role in production.

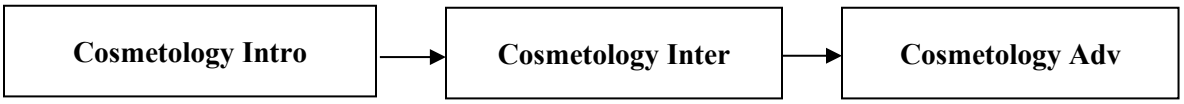
HEALTH, RECREATION, AND HUMAN SERVICES (HRH)

COSMETOLOGY

The Cosmetology program is your gateway to a vibrant and dynamic world of beauty and self-expression. This comprehensive program offers high school students the opportunity to explore and develop their skills in various aspects of cosmetology, including hair styling, hair cutting, hair coloring, hair perming, manicuring, nail art, and theatrical makeup techniques.

In grade 10, students can choose from two 3 credits courses, one focusing on hair styling, and the other focusing on esthetics. Students may choose to take only one of these courses, or they may take both. Students need a minimum of 3 credits from grade 10 in either the Cosmetology Intro or Cosmetology Intro Cohort courses to advance to the Cosmetology Intermediate level. Please note that at this time, the intermediate and advanced cosmetology courses are completely hair focused, and do not include any esthetics modules.

HAIRSYLING



Cosmetology Intro – 3 credits
No prerequisite
Cosmetology is your passport to the exciting world of cosmetology. This comprehensive program introduces students to foundational industry knowledge, equips them with the art of thermal hairstyling and guides them through the creation of stunning updo styles. It's the perfect opportunity to ignite your passion for beauty and embark on a creative journey in the Cosmetology field.

Cosmetology Inter – 5 credits
Prerequisite: Cosmetology Intro
This course will provide students with an opportunity to continue exploring the fascinating world of beauty and self-expression. Students will develop skills and knowledge in shampooing, drying and styling, hair cutting and hair coloring. Cosmetology 20 is a hands-on course that necessitates students actively practicing their skills on each other, especially during the shampoo module. It is a fundamental expectation of students that if a student wants to learn the art of shampooing, they should also be willing to participate as a model for their peers. Students will receive their own mannequin to be used for hair cutting and colouring.

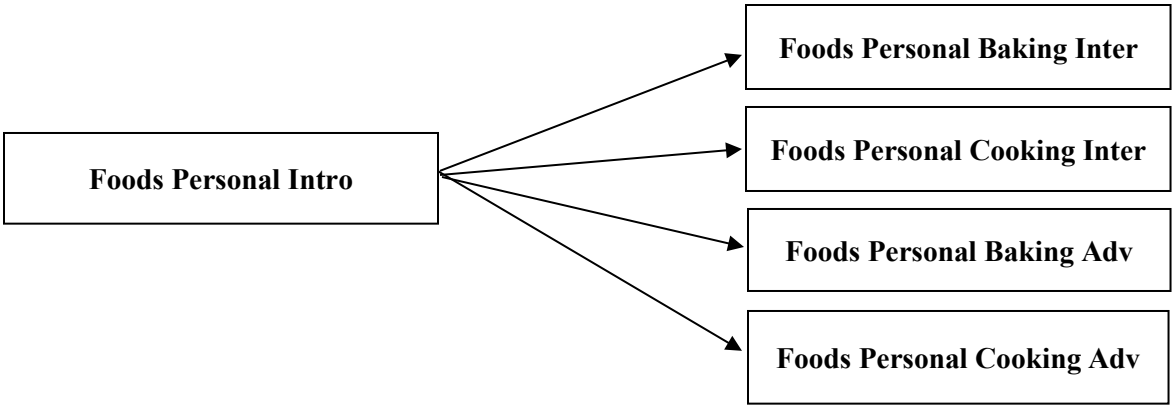
Cosmetology Advanced – 5 credits
Prerequisite: Cosmetology Inter
Students at the Advanced level of Cosmetology will continue to develop their hair styling, hair cutting and hair colouring skills, and will be taught advanced techniques that will elevate their level of understanding, including short haircuts, advanced highlight placements and colour lightening services. Students in this course will also be introduced to hair perming techniques, helping them to understand the science behind the process and develop the skills needed to achieve various curl and wave patterns. This course is designed to take your cosmetology skills to the next level, empowering you with the knowledge and expertise to excel in the ever-evolving beauty industry, and to give you the tools you need to pursue a career as a hairstylist. Students will receive their own mannequin to be used for hair cutting, colouring and perming.

ESTHETICS

Cosmetology Intro Cohort a

Cosmetology Intro Cohort a – 3 credits
No prerequisite
Esthetics is a captivating exploration of the world of esthetics, offering students the opportunity to delve into the art of manicuring, nail art, and theatrical makeup. This course is designed to inspire creativity, foster self-expression, and provide foundational skills for those interested in the beauty and entertainment industries. Esthetics is a hands-on course that necessitates that students actively practice on each other, particularly during the manicure module; it's essential that students who wish to learn manicuring are also willing to serve as models for their peers.

FOOD STUDIES



Foods Personal Intro - 3 credits
Students will learn the basics of cooking and baking by developing skills in the preparation of a variety of foods.

Each module in the Foods Personal Intro course consists of a combination of food preparation labs and written activities. Learning how to plan, prepare and serve family size portions. Each module will include food sanitation, kitchen safety, and nutritional wellbeing.

You must successfully complete the Food Basics 1010 module to take sequential courses in Grades 11 or 12.

Foods Personal Baking Inter - 3 credits
Prerequisite: Foods Personal Intro
This course is in greater depth than Intro with a focus on Baking. Students will develop their skills and learn to prepare a variety of baked goods from Yeast Breads, Cakes and Pastry and piping and icing techniques.

Foods Personal Baking Adv - 3 credits
Prerequisite: Foods Personal Intro
Foods Personal Baking Adv is in further depth into baking techniques and various types of icing. Written projects and baking projects are an expectation.

Foods Personal Cooking Inter – 3 credits
Prerequisite: Foods Personal Intro
More advanced cooking techniques and styles are practiced. Nutrition and healthy food choices and styles are explored. Modules include Safety and Sanitation, International and Vegetarian Cuisine.

Foods Personal Cooking Adv - 3 credits
Prerequisite: Foods Personal Intro
Cooking at the Advanced level is advanced and continuing from Cooking Inter. In this course, more advanced cooking styles are explored. Theory and written work as well as selecting recipes are an integral part of this course.

LEADERSHIP

Leadership 15 – 5 Credits

Leadership 15 is an introductory course to learn the ways to become successful leaders within the school setting and community. Students will explore and discover who they are as leaders and the importance of their voice. Fundamental leadership skills such as communication, problem solving and initiative will be explored through a variety of interactive and hands-on activities. Students will work together, and through collaboration and reflection will plan and lead various in class activities, small and large school events. Students will be required to complete volunteering hours to assist in their pursuit of leadership development.

Leadership 25 – 5 Credits

Leadership 25 is designed to continue the development and refinement of leadership skills. Through various hands-on and interactive activities, we will take a closer look at the difference between leadership and management. In addition, students will reflect on the characteristics of a positive leader and how to engage in meaningful and effective communication and self-advocacy. Students will work together to plan, lead, reflect and evaluate various in-class activities as well as small and large whole school events. Students will be required to complete volunteering hours to assist in their pursuit of leadership development.

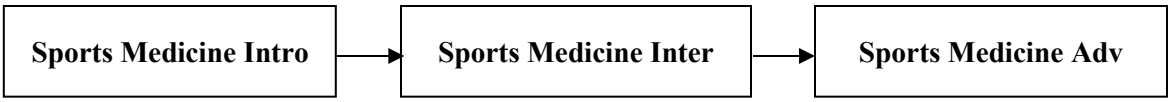
LEGAL STUDIES

Legal Studies Intro - 3 credits
What are an individual's rights? Through the use of realistic scenarios and case studies, students will gain a better understanding of our legal system. This exciting look at the Canadian justice system will include examining how laws directly affect students. This course will also look at various elements of criminal and civil law, and specifically at the Youth Criminal Justice Act.

Legal Studies Inter - 3 credits
No prerequisite
Legal Studies Inter is an exciting class which allows students to examine areas of law such as; Family Law, Employment Law, and Travel Law. Using case studies and simulation projects, students will have the opportunity to examine a broad range of legal issues relating to relationships, property division, support payments, minimum employment standards, and issues that may arise when travelling.

Legal Studies Adv - 5 credits
No prerequisite
Legal Studies Adv is a dynamic class that investigates topics in areas of law such as **Criminal Law, Landmark Decisions, Dispute Resolution, Negligence,** and **Controversy & Change.** We will examine the criminal justice system, including the criminal process and the roles and responsibilities of the participants. We also explore challenging and controversial issues that have impacted and formed our Canadian justice system. You will have the opportunity to go see a real court room and participate in your very own mock trial. If you have any interest in law or the criminal justice system, this is the course for you, *no previous experience in Legal Studies is necessary.*

SPORT MEDICINE



Sports Medicine Intro - 5 credits
This is a course for students who are interested in working as trainers with one of the school's athletic teams. The curriculum offers a logical beginning for students who are interested in such fields as: sports medicine, physiotherapy, nursing, medicine, anatomy, kinesiology, physiology, physical education or basic first aid. In addition to class time, students are also required to work as trainers for a minimum of 10 hours with school teams.

Sports Medicine Inter - 5 credits
Prerequisite: Sports Medicine Intro
This is a continuation of the Sports Medicine Intro course, concentrating on injuries of the upper body. Students will have to perfect a wide variety of taping skills, train in first aid and CPR, and increase their knowledge of stress tests and assessment of athletic injuries. For the practicum, students will work as a trainer for a school team for a minimum of 30 hours throughout the school year. Enrollment in class will be based upon teacher recommendations from Sports Medicine Intro.

Sports Medicine Adv - 5 credits
Prerequisite: Sports Medicine Inter
This course includes a concentrated study in the areas of rehabilitation of athletic injuries and an understanding of a variety of treatment modalities. Students will use the computer to work on scenarios focusing on detailed assessment and immediate care. Advanced CPR, taping skills, massage, and a study of career options through guest speakers and tours are also studied. As a trainer of a team, students will also work with mentoring Sports Medicine Intro and Inter trainers. For the practicum, students will work as a trainer for a school team for a minimum of 50 hours throughout the school year. Enrollment in class will be based upon teacher recommendations from Sports Medicine Inter.

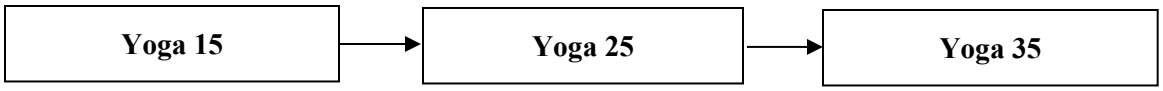
SPORT PERFORMANCE

Sports Performance Intro - 5 credits
The purpose of this course is to provide students involved in sports with the knowledge, skills and attitudes necessary to understand the factors related to sports performance. By exposing students to both the theoretical and practical nature of sports, students will be expected to demonstrate outcomes in a variety of areas. These include current training principles, basic sport nutrition and hydration, performance evaluation, goal setting, leadership fundamentals, and sport psychology.

Sports Performance Inter - 5 credits
Prerequisite: Sports Performance Intro
The purpose of this course is to build on the knowledge acquired in the Sports Performance Intro class. Students will be expected to demonstrate knowledge in high level athletic training. Students will study and use in a practical context: Developing and following a short-term personal fitness plan, developing a nutrition and hydration plan, Olympic lifting, advanced concepts of speed, agility and aerobic training. Enrollment in class will be based upon teacher recommendations from Sports Performance Intro.

Sports Performance Adv - 5 credits
Prerequisite: Sports Performance Inter
This course is a continuation of Sports Performance Inter. This course focuses on year-round high level athletic training. Sports Performance Adv concentrates on individual performance in an athletic setting. Students learn to design and implement a year-round program specific to an activity. Students will also learn to track and analyze their nutritional habits as they pertain to physical & mental performance. Enrollment in class will be based upon teacher recommendations from Sports Performance Inter.

YOGA



Yoga 15 – (3 or 5 credits)
This course will safely introduce students to the basic postures (asanas), breathing techniques and relaxation methods of yoga. It will also introduce students to the historical roots of yoga and give them an understanding of basic anatomy and physiology as it applies to this discipline. Students will develop an enhanced appreciation for, and acceptance of, their own body and its limitations. Students will learn to be non-judgmental about their own, and others', yoga practices. The program is designed to allow students to experience the benefits of increased flexibility, strength, focus and concentration. They will relieve stress, learn to relax at will, and experience the health benefits of yoga. Students must provide their own yoga mat.

Yoga 25 – (3 or 5 credits)
Prerequisite: Yoga 15
This course is a continuation of developing the basic postures (asanas), breathing techniques and relaxation methods of yoga. Students will investigate the origins of yoga, styles of yoga, philosophy of yoga, and continue to understand the anatomy and physiology as it applies to this discipline. Students will develop an enhanced appreciation for, and acceptance of, their own body and its limitations. Students will learn to be non-judgmental about their own, and others', yoga practices. The program is designed to allow students to experience the benefits of increased flexibility, strength, focus and concentration. They will relieve stress, learn to relax at will, and experience the health benefits of yoga. Students must provide their own yoga mat.

Yoga 35 – (3 or 5 credits)
Prerequisite: Yoga 25
This course is to further develop the understanding of all aspects of yoga, including the anatomy, physiology, philosophy, historical origins and styles of yoga as they are practiced around the world today. Students will develop an enhanced appreciation for, and acceptance of, their own body and its limitations. Students will learn to be non-judgmental about their own, and others', yoga practices. The program is designed to allow students to experience the benefits of increased flexibility, strength, focus and concentration. They will relieve stress, learn to relax at will, and experience the health benefits of yoga. Students must provide their own yoga mat.

CTS CREDIT RECOVERY (3 credits)

The CTS Credit Recovery course provides students with the opportunity to recover or earn additional credits required for graduation. This course structure aligns with the Calgary Board of Education's commitment to personalized, student-centered learning and ensuring every student succeeds.
The primary goal of this course is to offer a flexible, independent learning environment where students can earn necessary credits at their own pace. By allowing students to complete as many credits as they need, this course will support diverse learning needs and promote academic success.

Course Structure

The CTS Credit Recovery course will be structured as an independent learning course with a flexible approach. Students will select from a variety of credit options based on their individual graduation requirements.
While there will be no direct instruction, the teacher will be available during regular classes and tutorials to answer questions, provide guidance, and assess student work. This model empowers students to take charge of their learning while ensuring they have access to the necessary support.

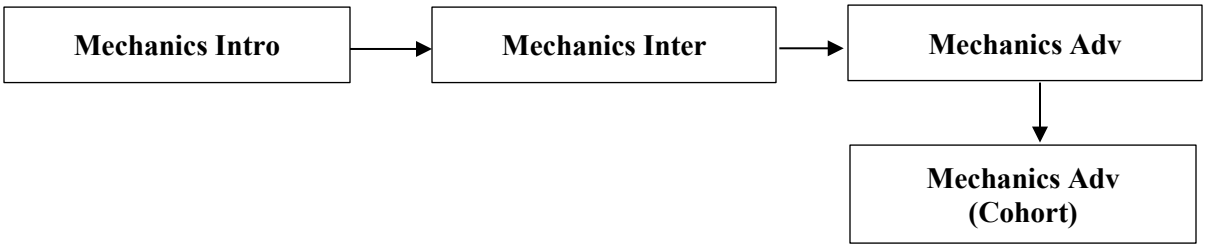
Benefits for Students

1. **Flexibility:** Students can work at their own pace and tailor their learning to their specific needs.
2. **Autonomy:** The independent nature of the course fosters self-discipline and personal responsibility.
3. **Support:** Access to a teacher for guidance and assessment ensures students receive the help they need.

The CTS Credit Recovery course will offer students up to a maximum of 19 CTS credit opportunities: three at the introductory level, four at the intermediate level, and 12 at the advanced level.

TRADE, MANUFACTURING AND TRANSPORTATION (TMT)

MECHANICS



The focus of the Mechanics courses is on skill development. The courses will be of benefit to all students, whether their interests are in vehicle ownership or career exploration.

Mechanics Intro - 3 credits
Mechanics Intro is an introductory level course. Students will study various vehicle systems and gain an understanding of how they operate together to make a functioning vehicle. Minor mechanical tasks will be performed in Mechanics Intro as well as disassembly and reassembly of a small gasoline engine. CTS modules in Mechanics Intro include:
- Vehicle service and care
- Engine fundamentals
- Ride and control systems

Mechanics Inter - 3 credits
Prerequisite: Mechanics Intro
Mechanics Inter is an intermediate level course that will focus on major mechanical repairs. CTS modules in Mechanics Inter include:
- Braking systems
- Ignition systems
- Suspension Systems

Theory and practical tasks will cover all aspects of these vehicle systems.

Mechanics Advanced - 5 credits
Prerequisite: Mechanics Inter
Mechanics Advanced is an advanced level course. Students will be able to choose from several CTS modules. Modules in Mechanics Advanced include:
- Engine performance diagnosis
- Engine tune-ups
- Engine removal and installation
- Engine reconditioning I (upper engine)
- Engine reconditioning II (lower engine)

WORK EXPERIENCE
15 / 25 / 35

Work Experience provides students with an opportunity to do some career exploration while working or volunteering outside the classroom in a community or professional environment. This course is designed for the development of valuable employability skills.

Students must acquire a minimum of 75 hours to earn 3 credits. After that accomplishment, they receive 1 credit for every 25 hours earned after the 75 hours worked at their work site. Students must be engaged in supervised work, and their hours are verified by their employer on weekly time sheets. Work Place Safety (HCS3000), a 1 credit course, must be completed by all students prior to any hours being counted for credit in Work Experience.

REGISTERED APPRENTICESHIP PROGRAM (RAP)
15 / 25 / 35

RAP is an opportunity for those students who wish to pursue a career in the trades after high school. This course allows students to be matched with a journeyman mentor to begin their apprenticeship while still in high school. The students must complete Work Place Safety (HCS3000), a 1 credit course, before being placed. If they are involved with construction trades, the CSTS course and Work Place Safety Practices (HCS 3010) must be taken as well prior to their placement. Students then complete a 5 credit (125 hour) work experience probationary period at the work site, to see if the match is working for both student and mentor. If both sides are in agreement, the apprenticeship may begin. Hours are earned towards the student's trade, while earning high school credits and receiving a salary.

- Students wanting to be involved in the RAP Program should start the process in their Grade 10 or 11 year with possible placements for the spring/summer of their Grade 10 or 11 year. A student/parent information night will be held in the spring.

ALBERTA HIGH SCHOOL DIPLOMA: GRADUATION REQUIREMENTS (ENGLISH)

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

100 CREDITS
including the following:

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

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

MATHEMATICS – 20 LEVEL
(Mathematics 20-1, Mathematics 20-2 or Mathematics 20-3)

SCIENCE – 20 LEVEL
(Science 20, Science 24, Biology 20, Chemistry 20 or Physics 20)

PHYSICAL EDUCATION 10 (3 CREDITS)

CAREER AND LIFE MANAGEMENT (3 CREDITS)

10 CREDITS IN ANY COMBINATION FROM
Career and Technology Studies (CTS) courses
Fine Arts courses
Second Languages courses
Physical Education 20 and/or 30
Knowledge and Employability courses
Registered Apprenticeship Program courses
Locally developed courses in CTS, fine arts, second languages, or Knowledge and Employability occupational courses

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

These courses may include:
30-level locally developed courses
Advanced level (3000 series) in Career and Technology Studies courses
30-level Work Experience courses
30-level Knowledge and Employability courses
30-level Registered Apprenticeship Program courses
30-level Green Certificate Specialization courses
Special Projects 30