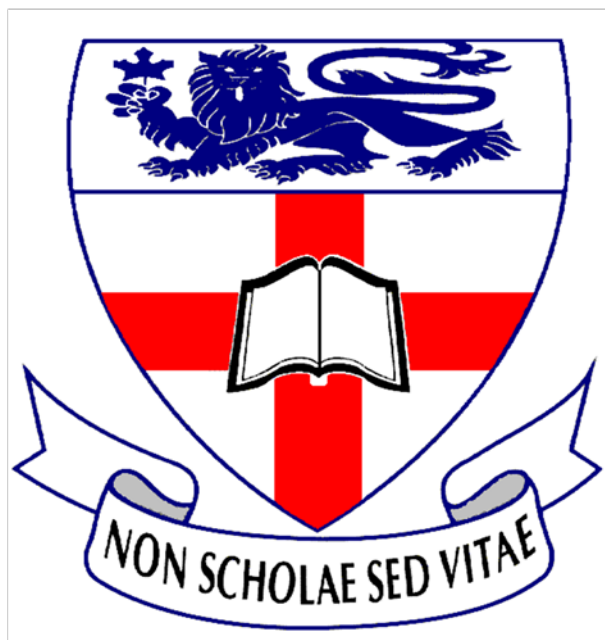


**SIR WINSTON CHURCHILL  
HIGH SCHOOL**

**PLANNING GUIDE  
2019 - 2020**



## SIR WINSTON CHURCHILL HIGH SCHOOL

### TABLE OF CONTENTS

CALM 20 (Career and Life Management) .....	3
BUSINESS ADMINISTRATION, FINANCE AND INFORMATION TECHNOLOGY (BIT)	
Graphic Design .....	5
Computing Science .....	7
Financial Management .....	8
Management & Marketing .....	9
TRADE, MANUFACTURING AND TRANSPORTATION (TMT)	
Electro-Technologies .....	10
Mechanics .....	11
MEDIA, DESIGN & COMMUNICATION ARTS (MDC)	
Design Studies .....	12
HEALTH, RECREATION, AND HUMAN SERVICES (HRC)	
Cosmetology .....	13
Food Studies .....	15
Legal Studies .....	16
Sports Medicine .....	17
Sports Performance .....	18
Yoga .....	19
ENGLISH LANGUAGE ARTS.....	20
FINE ARTS .....	23
INTERNATIONAL LANGUAGES .....	31
MATHEMATICS.....	39
PHYSICAL EDUCATION .....	41
SCIENCES .....	43
SOCIAL STUDIES .....	47
Psychology .....	49
WORK EXPERIENCE .....	50
RAP .....	50
SPECIAL PROGRAMS	
English Language Learners (ELL) .....	51
International Baccalaureate .....	53
GRADUATION REQUIREMENTS.....	65

## **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 theme, Human Sexuality.

## **CAREER AND TECHNOLOGY STUDIES (CTS)**

The Career and Technology Program of Studies offers students the opportunity to explore complementary courses that can develop and cultivate their individual talents, interests and abilities. These courses can help students:

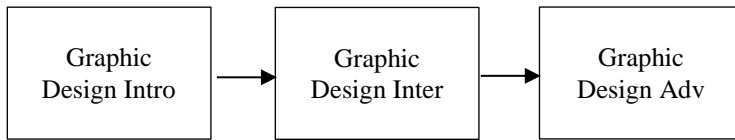
- prepare for entry into the workplace and/or related post-secondary programs
- develop daily living skills
- investigate career skills

Alberta Education has reorganized the Career and Technology Program of Studies from the original 22 “strands” to 5 occupational “clusters”. The occupational clusters are based on the National Occupational Classifications (NOC). The 5 occupational clusters include: Business, Finance and Information Technology (BIT), Trade, Manufacturing and Transportation (TMT), Media, Design and Communication Arts (MDC), Health, Recreation and Human Services (HRH) and Natural Resources (NAT). The intent of this reorganization is to make it easier for students to develop a personal “pathway” when planning for post-secondary education or employment after high school. A pathway is a series of high school courses that reflect a student’s interests and abilities.

Advanced Level courses may be used to satisfy Alberta high school diploma requirements. Depending upon the university and faculty chosen, advanced level C.T.S. courses may be used for university entrance purposes. They may also be used for the Rutherford scholarship.

## **BUSINESS ADMINISTRATION, FINANCE AND INFORMATION TECHNOLOGY (BIT)**

### **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**

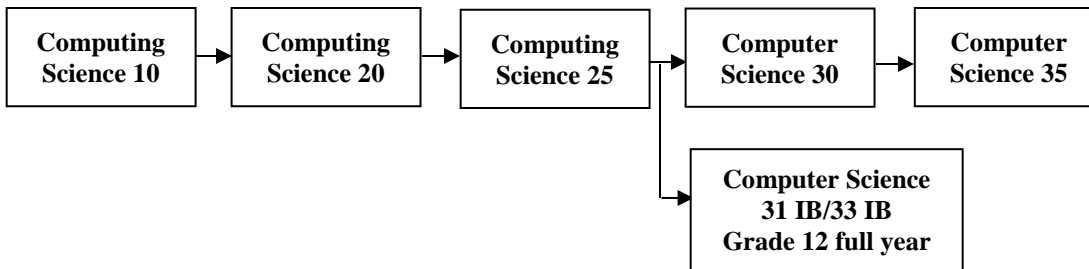
*Prerequisite: Graphic Design Inter*

***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.

## COMPUTING SCIENCE



### **Computer Science 10 - 3 credits**

**Introduction to Computer Programming:** This is an introductory course to the Computer Science pathway. In this course students explore through multiple topics in Computer Science including: programming in multiple computer languages, the relationship between technology and coding and the application of that relationship in a robotics project. Students rapidly learn about object oriented programming throughout all topics.

### **Computer Science 20 - 3 credits**

*Prerequisite: Computer Science 10*

**Object-Based Programming:** Using the Java computer programming language, students will solve problems by organizing information in a way that reflects the real world rather than the way computers are designed. Students will develop their understanding of decisions and repetitive instructions. They will also be introduced to Java graphics libraries and use lists of information called arrays in their programs.

### **Computer Science 25 - 3 credits**

*Prerequisite: Computer Science 20*

**Object-Oriented Designs and Data Structures:** 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. Recursion, inheritance and polymorphism get demystified.

### **Computer Science 30 - 3 credits**

*Prerequisite: Computer Science 25*

**Project Driven Application of Computer Science Skills:** Students develop their understanding of hardware and software as well as apply their computer programming skills. The ability to store data to files and implementing graphical user interfaces will be developed. Students will prepare a major project that develops their project management skills and integrate their skills acquired in other CTS areas.

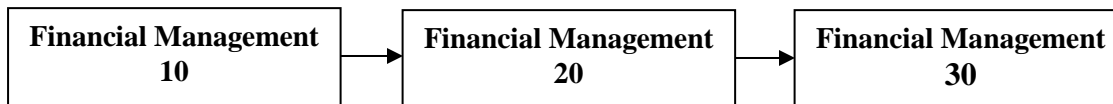
### **Computer Science 35 – 3 credits**

*Prerequisite: Computer Science 30*

#### **Dynamic Data Structures, Recursion and Project Problem Solving:**

Data structures are explored with each structure being presented in the context of the standard Java collections library using iterators, sets and maps. Students also learn to implement their own structure classes. A major project is undertaken to synthesize concepts covered, the programs students develop are now more sophisticated, and an emphasis is placed on efficiency and speed of accessing data.

## 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 a 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.

### **Financial Management 30** - 5 credits

*Prerequisite: Financial Management 20*

Financial Management 30 allows students to take prior accounting knowledge and apply those skills in real world situations. Through the use of an investing competition as well as many other real world examples we will learn how to read and analyze the financial health of a business and prescribe ways in which to improve that health. We will also learn how determine which businesses are good investments and which are not. Come and make millions in Financial Management 30!



## MANAGEMENT AND MARKETING

<b>Management and Marketing 10</b>
--

<b>Management and Marketing 20</b>
--

<b>Management and Marketing 30</b>
--

### **Management and Marketing 10 - 5 credits**

Students will learn how to be an entrepreneur. In the classroom, they will develop and operate their own businesses. By learning how to formulate a business plan, they will create and sell a product their company has designed.

### **Management and Marketing 20 - 3 credits**

Learn basic management and marketing concepts, retail merchandising strategies and how much print advertisements are all around us. Study the basics for what it takes to run a retail business, and the impact of print media.

### **Management and Marketing 30 - 3 credits**

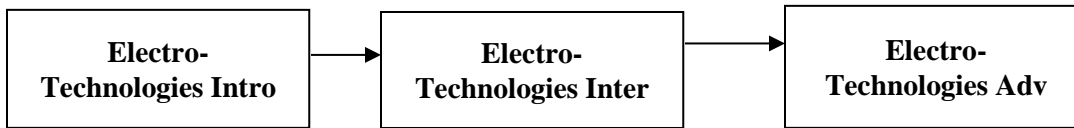
This is the class to learn about what it takes to be a business person. A great introduction if you have an interest in joining the business world right away and very valuable if you intend to take business at the post-secondary level.

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.

## TRADE, MANUFACTURING AND TRANSPORTATION (TMT)

### 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

This is an introductory electronics course, where you will learn to solder and discover the function of numerous electronic gadgets/components. Study DC power sources and learn how to read and measure resistances and voltages in DC circuits using a multi-meter. You will learn bread boarding techniques and construct several circuits to practice your skills. Virtually interact with a robot and learn to program using the language robotC. You will then be challenged to program your robot so it will be successful in completing several tasks. Finally, you will assemble your own electronic project that you get to keep! – Strobe light

#### **Electro-Technologies Inter** - 3 credits

*Prerequisite: Electro-Technologies Intro*

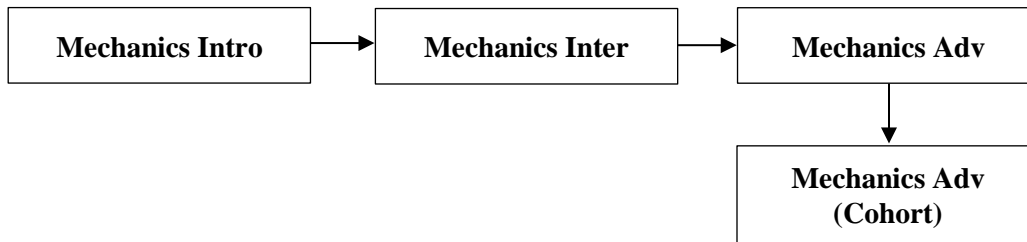
**Digital electronics** - Learn the building blocks to digital electronics. You will identify and explain logic systems, construct and experiment with basic gates, and simulate circuits using electronic workbench. You will completely disassemble a working computer system (easy part) and then reassemble the system to ensure it is still working properly (tricky part). Using the vex platform you will learn how to identify, interface, and experiment with small scale robots. Construction techniques will be explored as you build and experiment with numerous variables to increase the efficiency and desired outcome of the task. You will also gain experience in controlling the robot through a variety of programming techniques. There will be two in class tournaments to demonstrate your robot supremacy! Finally, using the photographic method you will assemble your own digital electronic project that you get to keep! – Digital Siren.

#### **Electro-Technologies Adv** - 3 credits

*Prerequisite: Electro-Technologies Inter*

This is an intermediate electronics course and will continue to build upon the skills learned in Electronics Intro. You will explore, experiment, and manipulate various electrical components and equipment such as capacitors, transformers, oscilloscopes, and ohmies. Using the Arduino-Uno platform, you will bread board several circuits and manipulate the outcomes with the programming language C++. You will be introduced to pneumatic circuits and have the opportunity to build 10 circuits using a variety of pneumatic components on the Festo learn line apparatus', and also simulate circuits using FluidSim. Finally, you will build and design your very own stereo that you get to keep!

## 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 101 as well as disassembly and reassembly of a small gasoline engine. CTS modules in Mechanics Intro include:

- vehicle service and care
- engine fundamentals
- hydraulic and pneumatic 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
- electric fundamentals.

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

### **Mechanics Advanced** - 3 or 6 credits

*Prerequisite: Mechanics Inter*

Mechanics Advanced is an advanced level course. Students will be able to choose from a number of CTS modules. Modules in Mechanics Advanced include:

- electrical components
- engine performance diagnosis
- engine tune-ups
- engine removal and installation
- engine reconditioning I (upper engine)
- engine reconditioning II (lower engine)
- computer management systems
- automatic transmissions

Prerequisites apply to some modules; therefore not all modules included in Mechanics Advanced are available to all students. Students who have received full credits in Mechanics Intro and Inter will have the required prerequisites for all modules.

## MEDIA, DESIGN & COMMUNICATION ARTS (MDC)

### 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 in 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 creating solid part models through the use of 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.

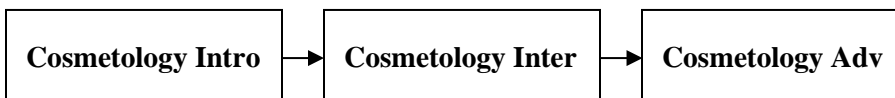
## HEALTH, RECREATION, AND HUMAN SERVICES (HRH)

### COSMETOLOGY

The Cosmetology program offers three years of study for students who are interested in learning all the secrets used to create artistic hair styles, haircuts, colors, and perming techniques. Students will also learn how to care for their nails, skin and to apply make-up products, by learning how to give esthetic treatments, and by choosing the best professional beauty products to use for themselves and others.

In grade 10, students can choose from four 3 credits courses. 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 Inter level and then the Cosmetology Adv level.

### HAIRSYLING



#### **Cosmetology Intro** – 3 credits

*No prerequisite*

This course will introduce the students to basic hair styling tools and techniques used to create a variety of hair styles with thermal styling, braiding designs, shampoos, roller sets and comb outs. These are just some of the techniques taught in this course. Students will also learn about professional hair care products that they can use for their own hair and scalp care needs.

#### **Cosmetology Inter** – 5 credits

*Prerequisite: Cosmetology Intro*

This course will provide students with an opportunity to develop skills and knowledge in hair cutting, hair coloring, and permanent waving. Students will continue to develop skills in shampooing, thermal styling, roller sets and comb outs on short and long hair. Students will receive not only their own manikin for hair cutting, and a cutting comb.

#### **Cosmetology Advanced** – 5 credits

*Prerequisite: Cosmetology Inter*

Students at the Advanced level of Cosmetology will be prepared to provide clients with basic salon services, such as: shampoos and sets, haircuts, colors, highlights, and perms. Students will also learn how to give pedicures and hair removal services. Reception duties, product sales, and salon management are also included at the Advanced level to prepare them for further training in an apprenticeship and salon employment.

## **ESTHETICS**

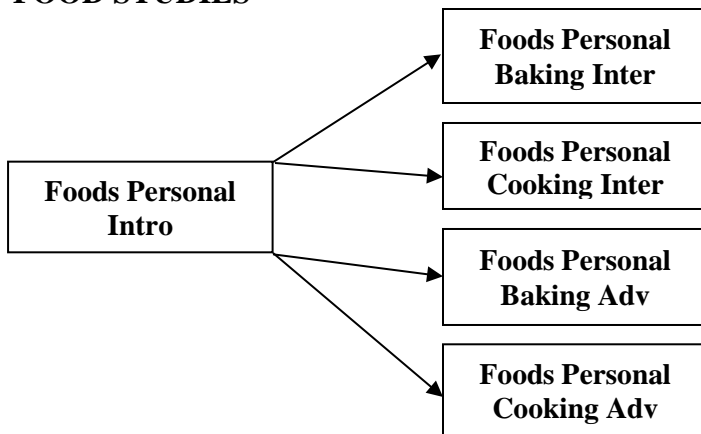
<p><b>Cosmetology Intro Cohort a</b></p>
--

### **Cosmetology Intro Cohort a– 3 credits**

*No prerequisite*

This course will teach the student how to care for their hands and nails. Students will be taught how to give a basic manicure with massage manipulations, and learn how to create nail art designs. They will also learn to give a facial treatment and do a make-up application while gaining a better understanding of professional skin care and make-up products.

## 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 in order 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 on 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.

## LEGAL STUDIES

**Legal Studies  
Intro**

**Legal Studies  
Inter**

**Legal Studies  
Adv**

### **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 in detail areas of law such as; **Aboriginal Law, Employment Law, and Travel Law**. Through the use of case studies and simulation projects, students will have the opportunity to examine a broad range of legal issues relating to FNMI rights, contracts of employment, unions and collective bargaining, employment insurance, and minimum employment standards in the workplace. Students will also have the opportunity to learn about legal issues that may arise when travelling domestically and internationally.

### **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, Negligence, and Property Law**. 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. Some of the curriculum content will be available on-line in order that students may work more independently. 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. Some of the curriculum content will be available on-line in order that students may work more independently. 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)**

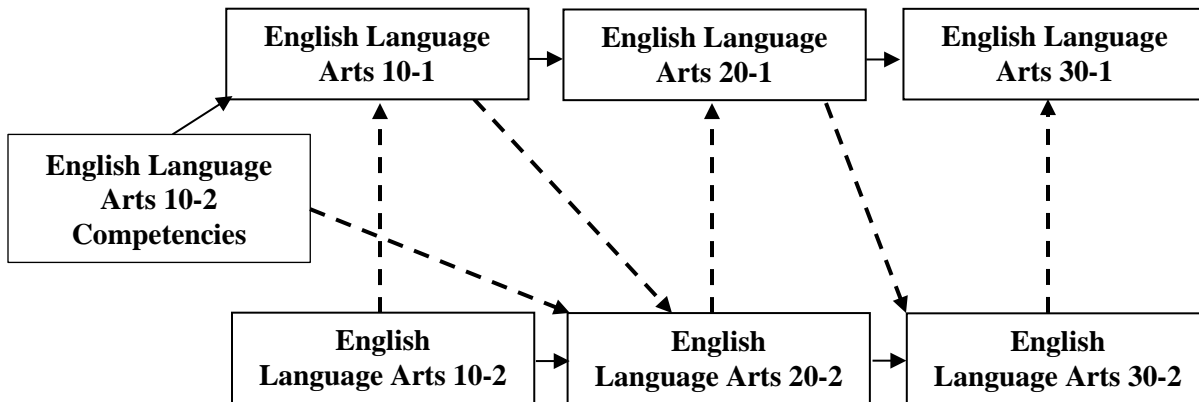
*Prerequisite: Yoga 25*

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.

## ENGLISH LANGUAGE ARTS

ELA 10-1, 20-1 and 30-1 are academically rigorous courses designed for students who are interested in 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 for students who are interested in popular culture and real world contexts or students who have encountered difficulty with English and who could benefit from continuing support. 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 a preparation for ELA 20-1 and ELA 20-1 IB. Course requirements include the study of short stories, novels, poetry, Shakespearean or modern drama, film, and non-fiction. Students who are best suited for this course are those who enjoy reading literature, writing critically about what they read.

### 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, Shakespearean or 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 new course designed for students who are interested in the 10-1 course, but who are currently lacking the demonstrated strengths (particularly with regards to reading and writing) needed to be successful. English 10-2 Competencies will be offered for students hoping to transition from the English 10-2 program to the English 10-1 program. It serves as a bridge course for students who lack the language skills required for the more academic program, but who have the desire to improve their English competencies. 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 desire to improve 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 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 designed to help students continue to develop more effective skills in reading, writing, listening and oral communication. Assignments encompass formal essays, both critical and analytical, personal responses, and creative writing for a variety of audiences and purposes. Course requirements include the study of short stories, novels, poetry, Shakespearean drama, film and non-fiction. Students who are best suited for this course are those who enjoy reading literature, writing critically about what they read.

### **English Language Arts 20-2 - 5 credits**

*Prerequisite: English Language Arts 10-2 OR 45% in ELA 10-1*

This is a general course designed to help 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, Shakespearean or 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 Language Arts 30-1 - 5 credits**

*Prerequisite: English Language Arts 20-1 OR a Teacher 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 surveys a variety of literature and other texts, with emphasis on understanding themes and literary techniques. It is also designed to help students continue to develop more effective skills in reading, writing, representing, viewing, listening and speaking. Writing assignments encompass formal essays, both critical and personal, and creative writing for a variety of audiences and purposes. Course content includes the study of short stories, novels, poetry, Shakespeare play, modern drama or feature film, and non-fiction. Students who are best suited for this course are those who enjoy reading literature, writing critically about what they read.

Students will be required to write the Alberta Diploma Exam which will count for 30% of their overall grade.

**English Language Arts 30-2 - 5 credits**

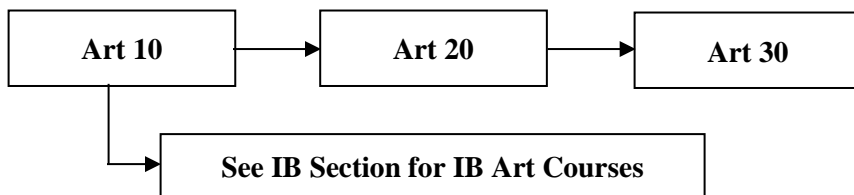
*Prerequisite: English Language Arts 20-2 OR 45% in English Language Arts 20-1*

This is a general course that emphasizes the integration of life skills with a study of language, media, and literature. It is designed to help students develop fundamental skills in reading, writing, representing, listening, viewing and speaking. Teachers will offer an integrated approach in the development of language arts skills by using short stories, novels, poetry, Shakespearean or 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.

Students will be required to write the Alberta Diploma Exam which will count for 30% of their overall grade. 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.

## FINE ARTS

### ART



#### **Art 10** - 5 credits

This is a fun and challenging introductory course which gives students the opportunity to explore and develop skills in drawing, colour and design, painting, photography, ceramics and sculpture. The program also introduces students to the cultural importance of art through the study of significant artists. Junior high art is not a prerequisite; however students must have an interest in art and a good work ethic.

#### **Art 20** - 5 credits

*Prerequisite: Art 10*

This is an intermediate course where students will continue to build their skills and confidence. Students will be challenged to explore a wider range of media in drawing, painting and sculpture. There is also an emphasis on the concept of style. Realism, abstraction, expressionism and pop art will be discussed.

#### **Art 30** - 5 credits

*Prerequisite: Art 20*

This is the final course in studio art. Students will now have the skills and confidence to explore a number of individually developed projects. Students will further develop their skills and apply them towards the creation of original, personal statements in drawing, painting, photography, sculpture, printmaking and mixed media. All students in this course will exhibit their work in our Grad Art Show at the end of each semester.

The completion of this challenging program empowers students to visually express themselves with confidence. This program also enables serious art students to create competitive portfolios for application to post-secondary programs in art, graphic design, interior design and architecture.

## CHORAL MUSIC



### **Choral Music 10** - 5 credits

This is a course that will allow the choral student to participate in a performing concert choir singing in a variety of musical styles and genres. It will be offered twice a week during after-school rehearsals *outside the regular timetable* for the entire school year. Concert Choir is scheduled this way to allow the ensemble to perform through the entire school year while receiving five credits. This course requires a commitment to a variety of performing experiences including concerts, workshops, and festivals.

### **Choral Music 20** - 5 credits

*Prerequisite: Choral Music 10*

This course builds upon the fundamentals of large ensemble singing as introduced in Choral Music 10. Student musicians are challenged to develop sight-reading skills, interpretive skills and independent rehearsal skills via section practices. In this course students will perform at school assemblies, the winter and spring concerts at the university, local music festivals, and a variety of Calgary venues.

### **Choral Music 30** - 5 credits

*Prerequisite: Choral Music 20*

In their third year of choir students will be expected to fulfill team leadership roles such as section leaders. They will serve as musical role models for younger musicians. This type of cross-grade course involvement allows students to work as musical mentors. This course requires a commitment to a variety of performing experiences. Students will perform at school assemblies, the winter and spring concerts at the university, local music festivals, and a variety of Calgary venues.



## DRAMA



### **Drama 10** - 5 credits

Students develop the skills of communication, 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*

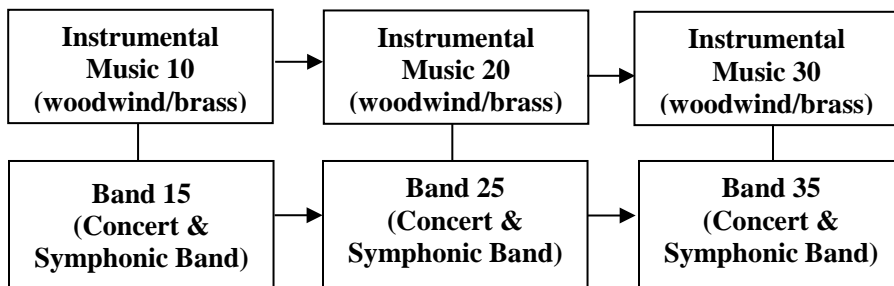
Drama 20 continues to build communication skills through an understanding of behavior and motivation. Through the study of Scripted Acting and Playwriting students develop the skills of listening and communicating in a more empathetic way. Students in Drama 20 also develop their critical thinking skills 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 as a way 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 (Woodwind) - 5 credits**

*Prerequisite:* <sup>\*1</sup> Junior high band participation **OR** a minimum of one full year of regular private lessons on a band instrument and an ability to read music.

This is a course designed to build fundamental musical skills on instruments. It emphasizes performance and covers all facets of music study including performance, theory, applied history, and chamber music. A midi-lab is used to augment the studies. **This course is a co-requisite needed to enroll in Band 15 (Concert & Symphonic Band, which is another 5 credit course occurring outside the regular timetable).** All Band and Instrumental music students must have basic skills in reading music notation.

<sup>\*1</sup> 3 years of Junior High band participation

### **Instrumental Music 10 (Brass and Percussion) - 5 credits**

*Prerequisite:* See Instrumental Music 10 (Wind) above

### **Band 15 (Concert & Symphonic Band) - 5 credits**

*Prerequisite:* Junior high music or equivalent private study

*Co-requisite:* Instrumental Music 10BP **OR** 10W

This course allows the band student to participate in a performing concert band. It will be offered two times per week during early morning rehearsals **outside of the regular timetable** for the entire school year. Concert band and Symphonic band 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 band trips, which occur on evenings and weekends. Parents of students in Band 15 (and Band 20 and 30) are members of the Sir Winston Churchill Band 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 Band Parents' Association held every September.

### **Instrumental Music 20 (Woodwind) - 5 credits**

*Prerequisite:* Instrumental Music 10BP **OR** 10W

*Co-requisite:* Band 25

This course continues to develop the techniques of the apprentice student musician. Music theory, applied history, and chamber music continue at a higher level. Twelve mini-computer work stations are used for theory, ear training, and composition. This course is performance focused, and continues to develop musicality and music concepts for the instrumentalist. Independent study projects allow students to design and focus a portion of this course.

**Instrumental Music 20 (Brass/Percussion) - 5 credits**

*Prerequisite: See Instrumental Music 20W above*

**Instrumental Music 30 (Woodwind) - 5 credits**

*Prerequisite: Instrumental Music 20BP OR 20W*

This is a sequential program for the advanced apprentice musician. Independent study projects will allow students to design and focus a portion of the course. This course, along with some private music lessons on instruments, fulfills the requirements for university entrance.

**Instrumental Music 30 (Brass/Percussion) - 5 credits**

*Prerequisite: See Instrumental Music 30W above*

**Band 25 (Concert & Symphonic Band) - 5 credits**

*Prerequisite: Band 15*

*Co-requisite: Instrumental Music 20B OR 20W*

This course builds upon the fundamentals of large ensemble playing as introduced in Band 15 (Concert & Symphonic Band). Student musicians explore a wider array of repertoire and are challenged to develop sight-reading skills, interpretive skills, and independent rehearsal skills via section practices. This course requires a commitment to a variety of performing experiences including: concerts, workshops, festivals, and band trips, which occur on evenings and weekends. Parents of students in this course are members of the Sir Winston Churchill Band Parents' Association and volunteer to support the program. There are extra costs for Band 25. 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 Band Parents' Association held every September.

**Band 35 (Concert & Symphonic Band) - 5 credits**

*Prerequisite: Band 25*

*Co-requisite: Instrumental Music 30BP OR 30W*

In their third year of band, students will be expected to fulfill team leadership roles such as section leader, principal player, or soloist. They will be a musical role model for younger musicians. This type of cross-grade course involvement allows students to work as musical mentors. This course requires a commitment to a variety of performing experiences including: concerts, workshops, festivals, and band trips, which occur on evenings and weekends. Parents of students in this course are members of the Sir Winston Churchill Band Parents' Association and volunteer to support the program. There are extra costs for Band 30. 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 Band Parents' Association held every September.

**Instrumental Jazz 15, 25, 35** - 5 credits

*Co-requisite: Band 15, 25 or 35 AND Instrumental Music 10 or 20 or 30*

This group of musicians is selected by audition in mid-September. All members must be involved in the regular Concert Band / Symphonic Band program. This is a five credit course that meets twice per week outside of the regular timetable on Monday and Wednesday after school from 3:30 to 5:00pm. This course focuses on advanced performance of jazz music and jazz improvisation in all styles, and will be limited to twenty musicians.

## 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.

### **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.

## TECHNICAL THEATRE

**Technical Theatre 15**

**Technical Theatre 25**

**Technical Theatre 35**

### **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 on 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 a production.

## INTERNATIONAL LANGUAGES

### WHY LEARN ANOTHER LANGUAGE?

- The ability to communicate in many languages is valuable.
- Knowing other languages will help you in fields such as literature, art, business, technology, math and sciences.
- Studying languages develops well-rounded individuals who are able to 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
- German
- Latin
- 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:

- Exchange trips offered to:
  - Spain / Mexico
  - Germany
  - Macau (receiving Alberta Education credits and taught in English)
  - Quebec
- Bi-annual trip opportunity to China
- Summer job immersion programs in Quebec
- Speech competitions throughout the academic year
- Awarded opportunities to German students for summer travel to Germany

**SIR WINSTON CHURCHILL IB LANGUAGE PROGRAMS:**

- Chinese (off campus)
- French
- German
- Spanish

**NOTE:** See the IB section of this course guide. Students may choose to take any IB language offered at the school as a stand-alone course. While doing so, the student must complete any CAS and T.O.K. requirements.

**CHALLENGE EXAMS**

Students wishing to challenge language courses in Chinese, French, German, Latin or Spanish should contact the Learning Leader of International Languages for information on the procedures to follow. The challenge exam covers all four aspects of language: speaking, listening, reading and writing.

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**

<b>Background</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
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	
9 years of Chinese (Chinese 9Y)	Chinese 30		

**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 covered 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 competence 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

Background	Grade 10	Grade 11	Grade 12
No French or very little	French 10	French 20	French 30
		French 20 IB ab initio	French 30 IB ab initio
<ul style="list-style-type: none"> <li>• 3 years Jr. High 70% average</li> <li>*please verify component list provided</li> <li>• French 10-9Y</li> </ul>	French 20	French 30	French 31 IB
		French 30 IB	
Immersion program*		French 30	French 31 IB
		French 30 IB	

\*Immersion program students may opt to take French 20 in their grade 10 year.

### French 10 – 5 Credits

This is a beginner level course for students with no, or very limited, background in French. Students will be exposed to listening, speaking, reading and writing through a variety of topics and themes.

### French 20 – 5 Credits

*Prerequisite: French 10 or Grades 7, 8 and 9 French with a 70% average.*

This course 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. Successful completion of this course will make students eligible to participate in a three month **exchange trip** to Quebec during the Grade 11 year.

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

- verb conjugations:
  - avoir, être, faire
  - common -er, -ir, -re verbs (regarder, chercher, choisir, finir, vendre, attendre, etc.)
  - auxiliary verbs: vouloir, pouvoir, devoir, aller, aimer, préférer + infinitive
  - aller + infinitive
- adjective agreement (gender + number) and placement
- common adverbs
  - toujours
  - souvent
  - etc.
- coordinate conjunctions : et, mais, ou, parce que
- 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.
- prepositions
- 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, ne . . . jamais)

### 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. This course further develops their ability to speak, listen, read, and write in French.

**TAKE PART IN THE 3 MONTH QUEBEC EXCHANGE PROGRAM!**

**French IB**

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

**GERMAN**

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

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

**German 10 Language and Culture – 5 Credits**

This beginner course introduces all four components of language learning: speaking, writing, listening and reading. Students will acquire an introductory knowledge of the culture and history of Germany and certain facets of everyday German life will be experienced to some degree.

**German 20 Language and Culture – 5 Credits**

*Prerequisite: German 10*

German 20 follows German 10 with a more in-depth study in oral German, grammar structures and reading. Students will gain a critical awareness of how the German speaking world has influenced the sciences, inventions, and history. More emphasis is placed on writing and the modern culture of German speaking countries with emphasis on practical, everyday vocabulary and structures.

Successful completion of this course will make students eligible to participate in a three month **exchange trip** to Germany during the Grade 11 year.

**German 30 Language and Culture – 5 Credits**

*Prerequisite: German 20*

German 30 further refines linguistic skills and adds to the cultural understanding and appreciation of the German way of life. Students will be able to express themselves more freely in a variety of settings.

**TAKE PART IN THE 3 MONTH GERMAN EXCHANGE PROGRAM!**

**German IB**

**NOTE:** See IB section for German IB course information.

**LATIN**

<b>Background</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
No Latin or very little	Latin 10	Latin 20	Latin 30

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

**Latin 10 Language and Culture – 5 Credits**

This course introduces students to the Latin language and develops reading, understanding, listening and translating Latin literature. By examining the influence of Latin, students will also gain an appreciation of language structure, scientific and legal terminology and Roman history.

**Latin 20 Language and Culture – 5 Credits**

*Prerequisite: Latin 10*

Students enrolled in Latin 20 will continue their study of the Latin language. A more detailed emphasis will be placed upon Latin vocabulary, grammar, and syntax, with a greater range of linguistic, political, and historical understanding of Ancient Rome.

**Latin 30 Language and Culture – 5 Credits**

*Prerequisite: Latin 20*

Latin 30 is an intense course involving an enriched study and appreciation for the structure of the language and the translation of excerpts of classical texts into colloquial English. In addition, students will acquire an appreciation of life during the Roman Empire.

**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 class 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.

**Spanish 20 Language and Culture – 5 Credits**

*Prerequisite: Spanish 10*

This intermediate course focuses on perfecting and developing Spanish using a variety of thematic materials and activities. Practical use of Spanish is emphasised through reading, writing, speaking and listening, conversation, spontaneous writing, and using Spanish in the community.

Successful completion of this course will make students eligible to participate in a three month **exchange trip** to Spain/Mexico during the Grade 11 year.

**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.

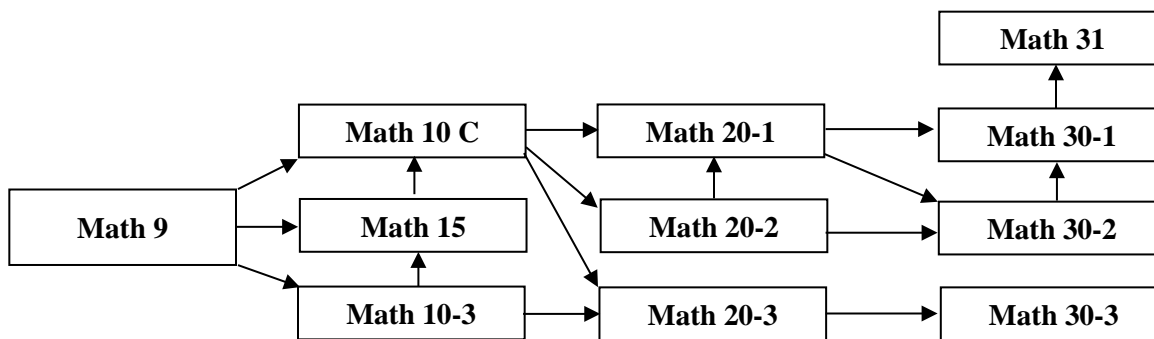
If students have previous experience with Spanish, please make an appointment with the Spanish teacher at the beginning of the school year **before** classes commence to determine which class is most appropriate.

**TAKE PART IN THE 3 MONTH SPANISH EXCHANGE PROGRAM!**

**Spanish IB**

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

## MATHEMATICS



### **Mathematics 10C** - 5 credits

*Prerequisite: Successful completion of Mathematics 9*

*Recommendation for Success: Students should have 60% 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 10C Cohort IB** - 5 credits

This course is designed to serve students that will be registering in the IB program. Students must register in this course if they wish to apply to the mathematics IB program. Students will study an enriched Mathematics 10C Common program as well as further investigations into number systems, set theory and coordinate geometry.

### **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, measurement, 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 a 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 45% 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 45% 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 45% or better in Mathematics 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

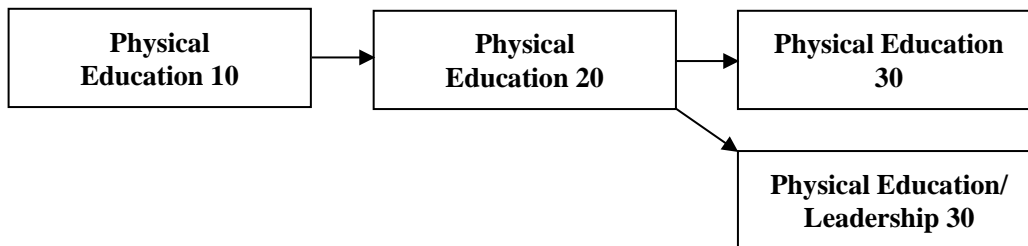
*Prerequisite: Mathematics 30-1*

*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 be able to choose between a variety of sports and activities for the rest of their class curriculum. The course stresses cooperation, sportsmanship, self-discipline and active participation.

### **Physical Education 20 - 5 credits (A one term 3-credit course is available)**

*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, racquetball, 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. (The 3 credit course requires 2 service hours).

**Successful completion of either the 3 or 5 credit course allows enrollment in P.E. 30.**

### **Physical Education 30 - 5 credits**

*Prerequisite: Physical Education 20 (3 or 5 credit courses)*

This course emphasizes individual off-campus activities and leadership skills. A leadership project involving volunteering in the community provides a valuable opportunity for individual growth. Course activities include: dance, rock climbing, curling, badminton, low organizational games, flat water and moving water kayaking, squash, tennis, and golf. The highlight of the course is an outdoor unit culminating in a three day camping trip.

### **Physical Education 30 / Leadership - 10 credits**

*Prerequisite: Physical Education 20 and teacher recommendation*

The Physical Education Department at Sir Winston Churchill High School offers a course that combines Physical Education 30 and Leadership. The two aspects of this course are intertwined and will span the entire school year. It is scheduled in the same period throughout both semesters. Through their work in this course students will obtain **5 credits** for Physical Education 30, as well as **5 CTS credits** for Leadership. Space in this course is limited.

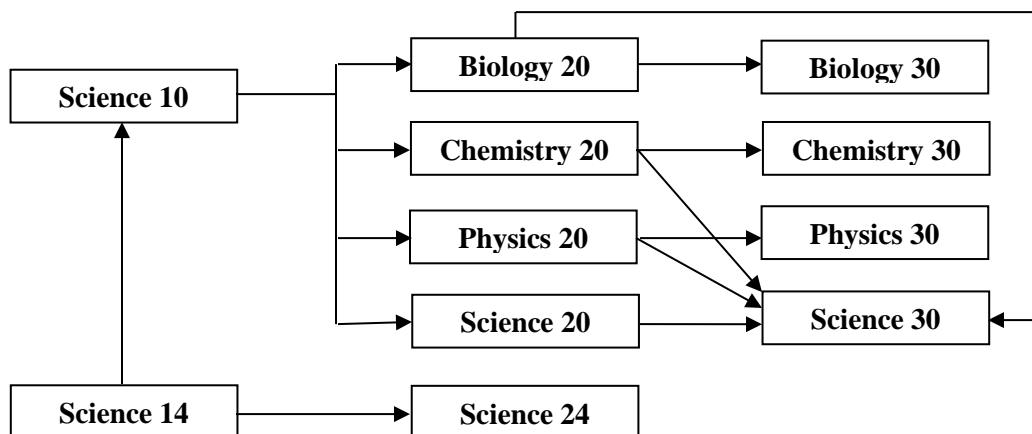
Physical Education Component - This aspect of class will reflect the already established Physical Education 30 course that is offered each semester. The primary difference being that it will be spread out over the entire year.

Leadership Component - Students will be involved in running, creating, organizing, and helping out at school events. Classroom learning around the topics of mentorship, leadership, goal setting, motivation, and public speaking. Mentorship in conjunction with our International Student population. A second overnight trip in addition to the camping trip that is already offered in the Physical Education 30 course with a focus on team building.

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

Some of the activities in the Physical Education program have a limited element of risk to them. The department would like to assure parents and students that all activities will be taught with well-conceived progressions in very safe environments.

## 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. A final lab exam is scheduled for each student during the time of final examinations. 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*

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 extensive 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 a 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 a reaction 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. An in-class individual final lab exam is planned near the end 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 in 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.

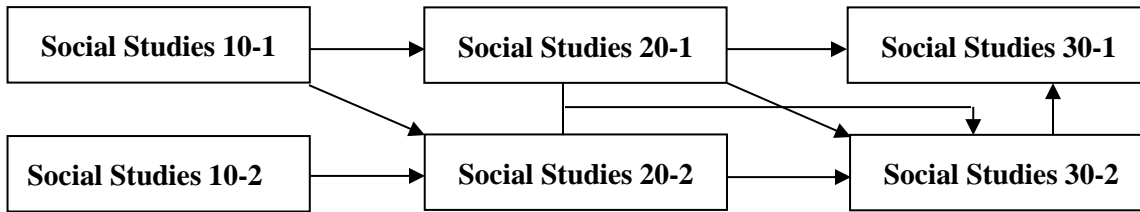
**Science 30** - 5 credits

*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 among 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*

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: 60% 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**

*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.

**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 each and 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 of 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.

## **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.

## SPECIAL PROGRAMS

### ENGLISH LANGUAGE LEARNERS (ELL)

Formerly known as English as a Second Language (ESL)

	Level 1 & 2		Level 3		Level 4	Level 5		
<b>English</b>	ELL Intro	ELL Intro	ELL Intermediate	ELL Intermediate/ Advanced	10-2 Competencies	→ 10-1	20-1	30-1
					ELA 10-2	→ 20-2	→ 30-2	
						→ 20-1	30-1	
<p><i>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.</i></p>						<p><i>*While students may go from 30-2 to 30-1, 20-2 to 20-1 has proven more successful as it allows for more experience with higher pace and critical analysis before entering 30-1.</i></p>		
<b>Social Studies</b>	ELL Canadian Studies	Social 10-2			Social 10-1	Social 20-2 Social 20-1	Social 30-2 Social 30-1	
<b>Science</b>	No Science at this level	ELL Science Process			Science 14	Science 24		
					↓ Science 10	Science 20 Bio 20 Chem 20 Physics 20	Science 30 Bio 30 Chem 30 Physics 30	
<b>Math</b>	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.							

#### ELL Introduction (Levels 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.

#### ELL Introduction to Canadian Studies - 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.

#### ELL Intermediate (Level 3 - 4) - 5 credits

This is a low-intermediate/intermediate level English class. Students will continue to develop their language skills. There is a strong emphasis on improving writing skills, vocabulary-building and grammar, and an introduction to literature study. This class is for students who are completing Alberta ELL Proficiency Benchmark 3 or 4.

**ELL Science Process and Vocabulary - 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) - 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.

## INTERNATIONAL BACCALAUREATE

Students who love learning and enjoy a rigorous academic challenge 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 fairly 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. The Diploma Program Courses must be balanced or well-rounded\*, including a humanities based IB course and a math/science based IB course (for example, Mathematics IB, Chemistry IB and History IB, plus be involved in TOK and CAS activities).

\*Students can take Economics HL, Language Acquisition, Computer Science HL, Business Management SL or Visual Arts HL as a stand-alone IB course (with TOK 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: registration fees (currently \$225 per year of examination), examination and mailing fees for the external assessment of their Extended Essay and Theory of Knowledge essays (currently \$175 per examination).

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 the 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, German ab initio, Mandarin ab initio\*, Spanish ab initio
  3. Individuals and Societies –World History HL  
Business Management SL, Economics HL
  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 Friday/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
4. a well-rounded selection of IB courses for Diploma Program Course IB Candidates (e.g Mathematics, Physics, and English **OR** e.g. Biology, Mathematics, and History)

If students accept placement in IB **they will be expected to fulfill their 2-year commitment to the program** notwithstanding unforeseen circumstances. Withdrawal from the program will be granted only with IB Coordinator's consent, not usually at the student or parents' request. Not achieving the grades you would like is not a reason to request and 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, Art HL, French ab initio, French SL, Spanish ab initio and German 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 Candidate and Science 10 in semester 1.
2. Math 20 IB, one Physics 25 IB **or** Biology 25 IB, **or** Business Management Advanced 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)
  - German 10
  - 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:**

*English 20/30/35 IB HL*

*Economics 20/30 IB HL*

*World History IB HL*

*Chemistry 30/35 IB HL*

*Computing Science 30 IB HL*

*Math 30/31/35 IB HL*

*Art 30/31 IB HL*

**SL subjects are:**

*Business Management Intro/Advanced IB SL*

*Language ab initio:*

- *French IB ab initio 20 and 30*
- *German 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*

*Biology 25/20/30 IB SL*

*Physics 25/20/30 IB SL*

*Math 20/30/31 IB SL*

## GRADE 10 COURSE SELECTIONS

### *Prerequisite – Acceptance into the IB Program*

#### **Biology 25 IB** - 3 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, cell division and nutrients. As well, the course introduces the statistics needed for IB science classes. This course is a prerequisite for Biology 20/30 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.

#### **Computing Science 10 & 20** - 3 credits each

*These are not IB courses, but are prerequisite for Computing Science IB.*

We can add the descriptors from the other section of the course descriptions since they are not IB courses.

#### **Mathematics 20 IB** - 5 credits

*Prerequisite: Math 10 Candidate*

Students will study an enriched and extended presentation of the Math 20-1 curriculum. 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 will occur in consultation with Mathematics IB teachers at the end of 20IB and the beginning of 30IB.

#### **Physics 25 IB** - 5 credits

*Prerequisite: Science 10*

Students will study an enriched presentation of various topics covered in regular Physics 20, such as: the scientific process and measurement with uncertainties, and kinematics and dynamics in one and two dimensions. This course is a prerequisite for Physics 20 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 IB & Art 30 IB HL** - 10 credits (full year)

*Prerequisite: Art 10*

Students in Art IB are introduced to an enriched studio program that provides opportunities to develop technical skills while exploring the following media: drawing, sculpture, printmaking, 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 personal research of themes, significant artists and culture in the I.B. Research Work Book.

### **Biology 20/30 IB SL** - 10 credits (full year)

*Prerequisite: Biology 25 IB*

Students study many of the same topics in Biology 20/30 IB as in the regular Biology 20 and 30 courses, but in more depth. The scientific method is used to explore the natural world. A major interdisciplinary research project is undertaken. The students must compile a final portfolio of scientific investigations.

### **Business Management Advanced IB SL** - 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.

### **Chemistry 20 IB SL**- 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, 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, and a lab portfolio is begun to be completed the following year. A major interdisciplinary research project is undertaken.

### **Computing Science 20/25** - 3 credits each (all three courses 10/20/25 must be completed before the end of grade 11)

*These are not IB courses, but are prerequisite for Computing Science IB.*

We can add the descriptors from the other section of the course descriptions since they are not IB courses

### **Economics 20 IB HL** (comprises Micro Economics and Economics for Consumers) – 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?*
- *Should the city pay for a new arena for the Calgary Flames?*

Economics is what can help us answer these questions. Economics 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. Actually, it's a much broader discipline that 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 the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

This economics 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. The course 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 increasingly interdependent world.

This course will be offered at the Higher Level meaning the topics we will cover are: microeconomics, macroeconomics, international economics and development economics.

**English 20 IB HL - 5 credits**

*Prerequisite: English 10-1*

Students will be introduced to a wide range of literature. Different genres of writing from various eras and countries will be discussed, studied, and compared. An emphasis will be placed on examining the effects of writers' craft. There is a great variety of reading, writing, listening, discussing, viewing and representing during this course. Pre-reading is required prior to the beginning of the course.

**Mathematics 30/31 IB SL - 10 credits (full year)**

*Prerequisite: Math 20 IB*

In addition to an enriched presentation of all the topics in Math 30-1 and Math 31, this course will cover extensions in calculus, vectors, probability, and statistics.

**Mathematics 30/31 IB HL - 13 credits (to be taken over 3 semesters)**

*Prerequisites: Math 20 IB and teacher recommendation*

In addition to an enriched presentation of all the topics in Math 30-1 and Math 31, this course will cover extensions in calculus, vectors, matrices, inverse trigonometric functions, probability density functions, sets, relations and groups.

**Physics 20/30 IB SL - 10 credits (full year)**

*Prerequisite: Physics 25/35 IB*

In this course, you will complete all the Alberta Physics Program of Studies in Physics, and also complete the requirements for Standard Level Physics IB. This is an enriched, accelerated physics program. Excellent math skills are required and the Math IB program is strongly recommended concurrently. A major interdisciplinary research project is undertaken. A lab portfolio is completed.

**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 – both democratic and dictatorships. (Includes American history)

**Theory of Knowledge - 3 credits**

*Mandatory for all IB students.*

This course introduces the ideas of knowing and knowledge, types of knowledge and how we know what we know by examining the various ways of knowing IB has identified. 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 or as a term course. 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 Level**

The two year ab initio language course is designed for students enrolled in the IB program who have a 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. Three themes are used to explore the life and culture: **Individual & Society, Leisure & Work, and Urban & Rural Environment**. A specific core syllabus and language-specific syllabus for the International Baccalaureate Program (IB) is used to guide the course.

**French ab initio 20 IB– 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 increasing students’ cultural awareness of the Francophone community.

**German ab initio 20 IB– 5 credits**

*Prerequisite: German 10*

This German course builds on various elements presented in the German 10 Language and Culture course. Students in this course will further develop the four areas of language learning (reading, writing, listening, and speaking). The three German language IB ab initio curriculum themes accentuate the exploration of the German 20 Language and Culture curriculum from Alberta Education, thus increasing the breadth and depth of the German 20 course. Cultural elements of the German-speaking countries and regions will be included to increase students’ awareness.

**Spanish ab initio 20 IB– 5 credits**

*Prerequisite: Spanish 10*

In this Spanish course students will begin to study the three 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 – 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 supplements readings are added to the program to improve reading comprehension and 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 particular communicative purposes. Students will be able to explore cultural aspects of the Francophone world through the study of texts and visual materials as a mean of exploring the history, current events, values and attitudes of a range of French speaking countries. Comparisons to other cultures will be established in order to celebrate the difference.

## GRADE 12 IB COURSE SELECTIONS

### **Art 31 IB HL - 5 credits**

*Prerequisite: Art 20 IB*

Students in Art 30/31 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 - 10 credits (full year)**

*Prerequisite: Chemistry 20 IB*

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. A lab portfolio is completed.

### **Computing Science 30 IB HL - 11 credits (full year)**

*Prerequisites: Computing Science 10/20/25 IB and enrollment as an IB Higher Level Computer Candidate*

*A student cannot get credit in both Computing Science 301 and Computing Science 31 IB. Students have an opportunity to engage in a rigorous and dynamic course that is of university level in rigor.*

#### **Topics include:**

- **Dynamic Data Structures:** Structures are studied as standard Java collections, using iterators, sets and maps, but student must also independently design ADT (Abstract Data Types) implementing their own versions of dynamic data structures such as arraylists, linked lists, binary search trees, stacks and queues.
- **File Handling:** Both sequential and direct access file handling structures are designed and implemented.
- **Object oriented programming option** will be selected and taught from the IB optional topics.
- **Computer Program Internal Assessment Project:** Students will plan and develop program solutions from their choice of IB topic areas, the program will provide a solution to a problem and encompass exception handling, testing, file handling, a suitable data structure and a graphical user interface. The internal assessment provides students an opportunity to truly demonstrate and extend their skills.
- **Extended Computer Science Topics:** Topics include: computational thinking, systems analysis and design, computer architecture and peripherals, data representation, number systems and representations, Boolean logic, Operating systems and utilities, algorithmic evaluation, social significance and implications of computer systems, and a case study of an industry wide application.
- IB students complete the Computer Program Internal Assessment Project and present it for assessment using web technologies.
- **Extended IB Project:** Students extend their knowledge and skills by undertaking a further project in which they select a topic of their choice. Previous projects have included app development, web services, creating a compiler and robotics solutions. This project commences once IB exams are completed in May.

**English 30/35 IB HL** - 10 credits (full year)

*Prerequisite: English 20 IB*

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. At various points during this year long experience, students will be expected to complete both oral and written final exams as well as write a self-directed Works in Translation essay in order to meet expectations of the IB program. In addition, they will be responsible for writing the Alberta Diplomas by the end of the course. Pre-reading will be required prior to the beginning of the course.

**Economics 30 IB HL** (comprised of Macro Economics and International/Developmental Economics) – 8 credits (full year)

*Prerequisite: Economics 20 IB*

This course continues with the content described in the grade 11 course offering.

**Mathematics 35 IB HL** – 3 credits

*Prerequisite: Mathematics 30/31 HL IB*

Students will focus on the study of complex numbers, polar geometry, statistical methods, and series and differential calculus.

**World History IB HL** - 10 credits (full year)

*Prerequisite: Social Studies 20 IB HL*

This course provides a detailed outline survey of modern American and European 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 regional study is The Americas. Topics covered include events from the U.S. Civil War to the end of the Cold War.

**International Languages – Ab Initio Level**

**French ab initio 30 IB**– 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 three ab initio themes. Students will engage in more advanced enriched activities in terms of scope and depth, frequency, and richness of expression.

**German ab initio 30 IB**– 5 credits

*Prerequisite: German 20 IB ab initio*

Based on the German 30 Language and Culture curriculum of Alberta Education and the language IB ab initio curriculum, this course prepares students for the German 30 IB ab initio oral, reading comprehension and written exams. The three ab initio themes are explored in more depth which will allow students to increase the scope and depth of their understanding of the German culture while enriching their overall German language skills in all four areas of language learning (reading, writing, listening and speaking).

**Spanish ab initio 30 IB– 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 three ab initio themes and enhance their understanding of the Hispanic community.

**International Languages – Standard Level**

**French 31 IB SL – 5 credits**

*Prerequisite: French 30 IB*

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: Journals, blogs, editorials, personal and formal letters, etc.

## International Baccalaureate Course Sequencing

Updated December, 2018

SL – Standard Level  
HL – Higher Level

IBO Subjects	Grade 10 Students apply for IB in November		Grade 11		Grade 12	
	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester
Math SL	Math 10 Cohort IB (Candidate)	Math 20 IB	Math 30/31IB SL (Full Year)			
Math HL	Math 10 Cohort IB (Candidate)	Math 20 IB	Math 30/31IB HL (Full Year)			Math 35 IB HL
Further Math	Math 10 Cohort IB (Candidate)	Math 20 IB	Math 30/31IB HL and Further Math (Full Year)		Math 35 IB HL, Further Math (first three terms)	
Biology SL	Science 10	Bio 25 IB	Biology 20/30 IB SL (Full Year)			
Physics SL	Science 10 Math 10 Cohort IB (Candidate)	Physics 25 IB (semester 2)	Physics 20/30 IB SL (Full Year)			
Business Management SL	Financial Mgt. 101 (recommended) (term 1, 2 or 3)	BM Intro IB (term 4)	Business & Management Adv IB SL (Full Year)			
Economics HL			Economics 20 IB HL (semester 1 or 2)		Economics 30IB HL (Full Year)	
Chemistry HL	Science 10 (either semester) Math 10 Cohort IB (Candidate) (first semester)		Chemistry 20 IB SL		Chemistry 30/35 IB HL (Full Year)	
World History HL	Social Studies 10-1 (either semester)		Social 20 IB HL (semester 1 or 2)		World History IB HL (Full Year)	
English Literature HL	English 10-1 (either semester)		English 20 IB HL (semester 1 or 2)		English 30/35 IB HL (Full Year)	
French B - ab initio	French 10 (either semester)		French ab initio 20IB (semester 1 or 2)		French ab initio 30IB	
French B SL	French 20 (either semester) or French Immersion		French 30 IB SL (semester 1 or 2)		French 31 IB SL	
German B ab initio	German 10 (either semester)		German ab initio 20IB (semester 1 or 2)		German ab initio 30IB	
Spanish B ab-initio	Spanish 10 (either semester)		Spanish ab initio 20IB (semester 1 or 2)		Spanish ab initio 30IB	
Mandarin B ab initio	Through Sir Winston Churchill HS - Students apply for IB course - IBO Registration is completed - Final Exam written at SWC - Chinese 10 H recommended  <i>CLASSES ARE COMPLETED AT The Chinese Academy on Saturdays</i> - Oral and Written exams - Academy has additional fees		<i>Mandarin ab-initio 20 IB (Completed Off-Campus - Full Year)</i>		<i>Mandarin ab-initio 30 IB (Completed Off-Campus - Full Year)</i>	
Mandarin B SL			<i>Mandarin 20 IB SL (Completed Off-Campus - Full Year)</i>		<i>Mandarin 30 IB SL (Completed Off-Campus - Full Year)</i>	
Cantonese B SL			<i>Cantonese B 20 IB SL (Completed Off-Campus - Full Year)</i>		<i>Cantonese 30 IB SL (Completed Off-Campus - Full Year)</i>	
Art Visual Arts HL	Art 10 (either semester)		Art 20 IB & Art 30 IB HL (Full Year)		Art 31 IB HL	
Computer Science HL	Computing Science 10/20 (term courses) (CS 20 can be completed in grade 11)		Computing Science 20/25 (term courses) (all three term courses completed by the end of grade 11)		Computing Science 30IB HL (full year)	
Theory of Knowledge			All partial IB students complete TOK in a term course. Diploma students – blended morning and online course throughout the year		Diploma Students: TOK within all IB courses this year, once a week and a few Friday afternoons	



**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