



Immanuel Christian Secondary School

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"The Society for Christian Education in Southern Alberta (SCESA) seeks to foster, promote, and provide Christ-centered education for those who embrace a Biblical worldview as summarized in our Statement of Faith, by establishing and maintaining schools from K-12, and by advocating the vision of Christian Education."

Senior High Course Registration Guide

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VISION

SCESA is a community that celebrates the Lordship of Christ. We envision a partnership with the home and church that nurtures and equips students to serve Christ and impact the world for Him. In all things we are guided by the Word of God.

CREATION: that man, the world, and its purpose, is to be understood only in relation to God, the Creator and to Jesus Christ the Redeemer.

SIN: that man's disobedience to his Creator has broken the relationship with his Maker and has caused God's curse on life.

REDEMPTION: that Christ, the Word Incarnate, is the only Redeemer and Renewer of life, in that He restores the relationship between God and creation.

HUMAN LIFE: that human life in its entirety, which includes the field of learning and teaching, unfolds itself as service either to God as He reveals Himself in the Scriptures, or to an idol.

KNOWLEDGE: that true knowledge is made possible only by means of a true faith in Jesus Christ, and finds its source in the Word of God, through the assurance of the Holy Spirit.

THE CHILD AND THE SCHOOL: by virtue of the covenant of grace we look upon our children as belonging to Christ our King, and the school as a training center to prepare them to serve the Lord in His domain here below.

LEARNING AND TEACHING: that all learning and teaching pursued in faithful obedience to God's command to subdue the earth can proceed only in the light of God's redeeming Word.

STATEMENT OF PRINCIPLES

Mission Statement

To provide a Christian environment in which
God calls His children to develop and use their gifts
in joyful service in His Kingdom

WELCOME TO IMMANUEL CHRISTIAN SECONDARY SCHOOL! The purpose of this *Student Registration Guide* is to help students and parents make informed decisions regarding course requests for the upcoming school year. As students, you will spend at least three years earning your high school diploma. If you are to get the most out of the many opportunities our school offers, you need to plan a program that considers each of these years. Read the information carefully and follow the steps below. Aim to get as much as possible out of these three years, and you will increase your chances of success in your personal development and your chosen career.

At ICSS, we offer a wide range of programs:

- Academic
- Career and Technology Studies (CTS)
- Knowledge and Employability Program (K & E)
- Registered Apprenticeship Program (RAP)
- Special Education

If there are questions regarding our programs or courses, please call the school at 403-328-4783 and ask to speak to a school administrator or counsellor.

Planning Your Program

Step One Self Reflection

This information is designed to assist you in selecting the high school program that best suits you. However, you first must do some serious thinking.

- What are your interests?
- What are your aptitudes or abilities?
- What are your achievements?
- Where would you like to be in 3 years? In 5 years? In 10 years?
- How much effort are you willing to spend to get there?

Consider your past record. Is it a good indication of your interests, aptitude, abilities, and total possible effort?

- What is your educational goal? Where do you want to obtain it?
- What courses are required to get there?
- How much time is required? (school training / other training)

- How much work or effort is required?
- To what extent are you willing to meet all of these requirements?

You are encouraged to discuss this first and foremost with your parents. As well, our Guidance Counselor is also a good person to discuss your plans with. He has access to a wide variety of information that can help you make informed choices.

Success in job application and admission to post-secondary institutions will often be determined by the courses you have selected, the level of difficulty you have maintained, and the marks you have received. In other words, a high school diploma is not in itself the key that opens the door to acceptable employment or further education.

Above all, you should recognize that God has granted you talents and gifts and has given you the responsibility to use them to the utmost of your ability in obedience to His Word.

Step Two Understand Graduation Requirements

The Alberta High School Diploma is an official document issued by Alberta Education and certifies the holder has completed a prescribed program of instruction at a high school or through other formats under the direction and supervision of Alberta Education. The requirements indicated in the chart below 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. You are advised to check the calendars of post-secondary institutions for specific admission requirements

To obtain an Alberta High School Diploma, you need to:

1. Earn a minimum of 100 credits
2. Complete and meet the standards of the following specified courses:
 - English Language Arts 30 level (English Language Arts 30-1, 30-2)
 - Social Studies 30 level (Social Studies 30-1 or 30-2)
 - Mathematics 20 level (Math 20-1, 20-2, or 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)
3. Complete and meet the following additional standards:
 - 10 credits in any combination from: Career and Technology Studies (CTS), Fine Arts, Second Languages, Physical Education 20 and/or 30, or Registered Apprenticeship Program (RAP).

- 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)
4. Students at ICSS are also expected to complete and meet the standards of the following specified courses:
- Religious Meanings 20 (3 credits)
 - Sociology 30 (3 credits)

If you would like to access more information on High School curriculum, you should consult the following Web site: <http://education.alberta.ca./parents/resources/handbook.aspx> or <http://education.alberta.ca>

GRADE 12 DIPLOMA COURSES

There are provincial examinations in ELA 30-1 and 30-2, Math 30-1 and 30-2, Biology 30, Chemistry 30, Physics 30, and Social Studies 30-1 and 30-2. Students taking these courses must write the diploma exam, which counts for 30% of the final mark in that course.

Step Three

Understand Course Names, Codes, and Sequences

Courses numbered 10-1, 20-1, 30-1, or 31, are primarily designed for students planning on entering a university or specific programs in colleges and technical schools.

Courses numbered 10-2, 20-2, or 30-2, are primarily designed for students planning or entering some programs in colleges, polytechnic schools, or entering the workforce.

Courses numbered 10-3 (14) or 20-3 (24) are primarily designed for students whose success in Math and Science has been limited. Students taking these courses may be eligible for non-technical programs at post-secondary institutions.

Courses numbered 10-4, 20-4, or 30-4, are primarily designed for students planning on entering the workforce upon completion of a certificate of High School Achievement.

You may find yourself registered in different course sequences depending on the subject as well as your prior levels of achievement, work habits and other qualities.

GRADE 10 COURSE ENTRANCE CRITERIA

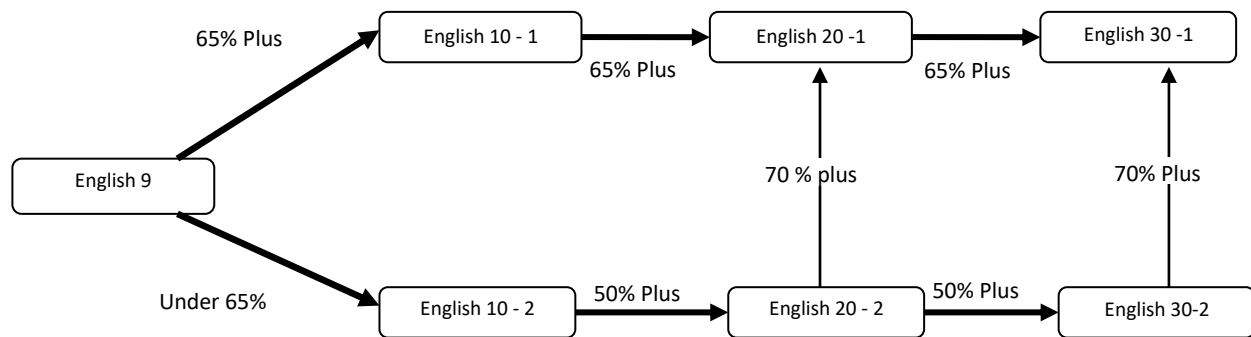
High School programs recognize and accommodate the wide range of developmental needs, abilities, and differences that exist among students. In order to be successful in high school, we recommend that Grade 9 students meet the criteria outlined below.

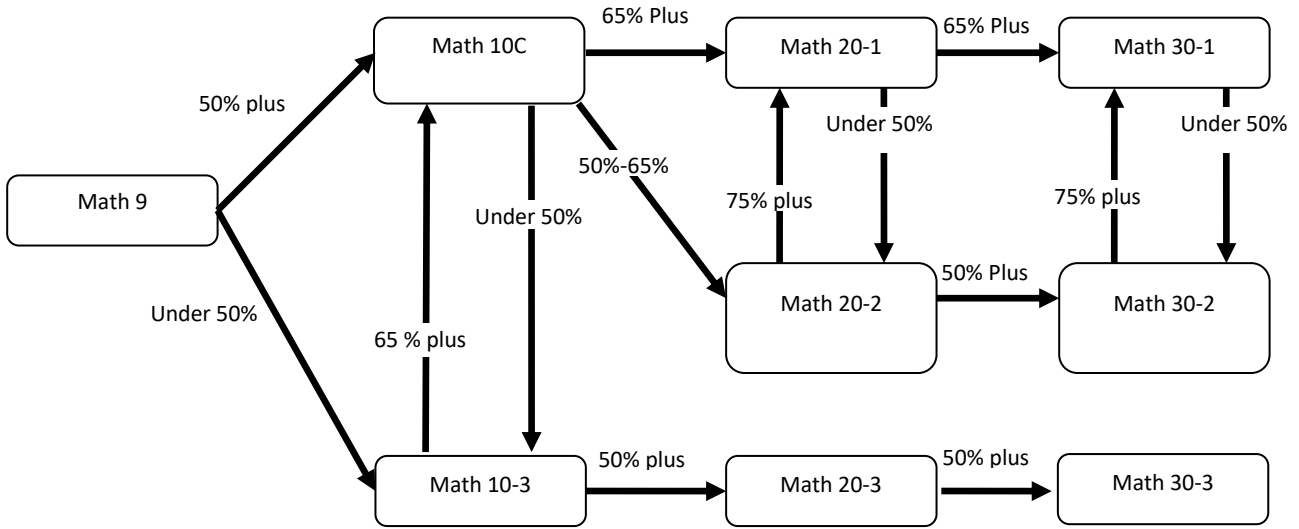
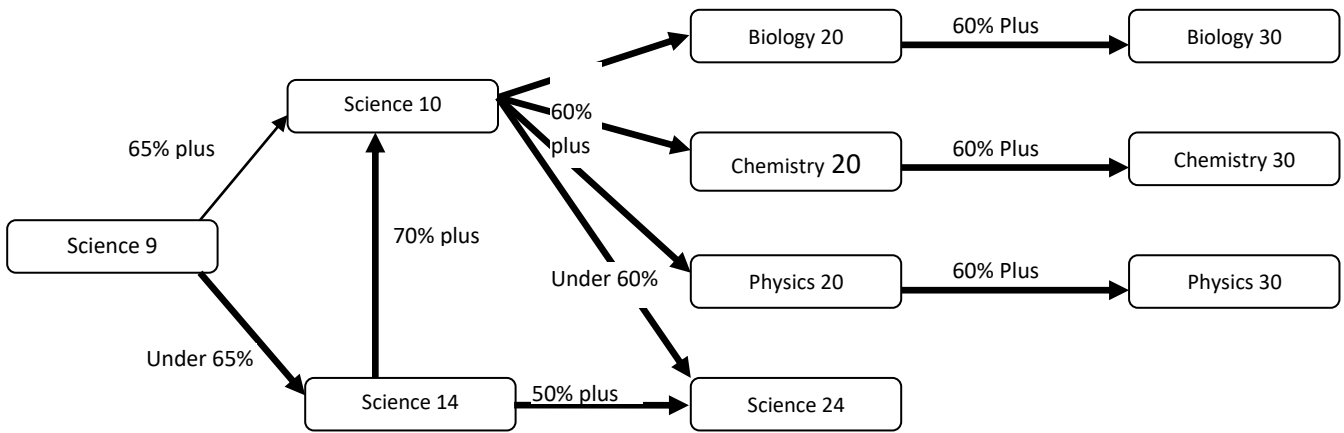
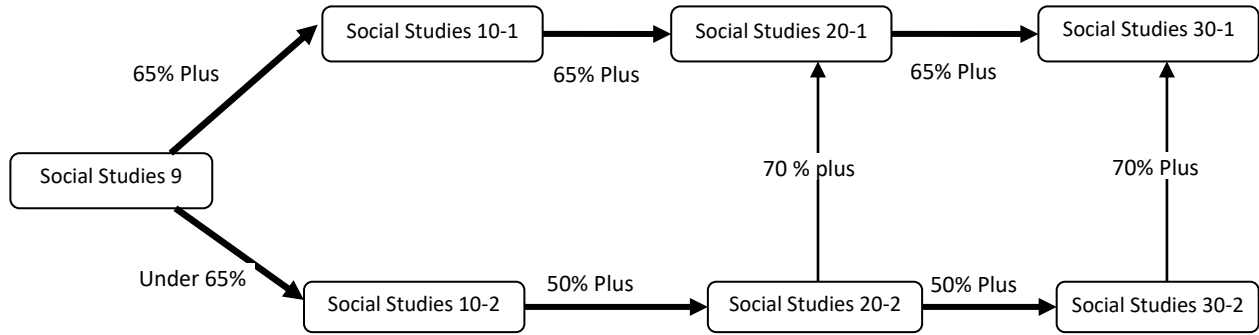
GRADE 9 COURSE	GRADE 9 MARK	HIGH SCHOOL COURSE
English Language Arts 9	less than 65%	English Language Arts 10-2
	65% or greater	English Language Arts 10-1
Math 9	less than 50%	Math 10-3
	50% or greater	Math 10C
Social Studies 9	less than 65%	Social Studies 10-2
	65% or greater	Social Studies 10-1
Science 9	less than 65%	Science 14
	65% or greater	Science 10

COURSE SEQUENCE PREREQUISITES

Courses are arranged in sequences such as Social 10, 20, 30. Ordinarily, a student must achieve a mark of 50% or higher in order to take the next course in a sequence. However, you need to be aware that in most cases in the 10-1, 20-1, 30-1 sequence, our school policy is that a 65% or better is needed to move to the next course level.

All of this is spelled out in more detail:





Prerequisite requirements may be waived by the principal, under special circumstances, and/or in response to an appeal from a student and his/her parents. These judgments will be made on an individual basis upon application by the student and the parent.

Step Four Understand Credits

Each course has an assigned credit value determined by the number of hours of instruction. One credit is awarded per 25 hours of instruction. Full courses (125 hours) award 5 credits upon completion; half courses (62.5 hours) award 3 credits upon completion. Career and Technology Studies (CTS) courses consist of single credit modules, but are typically packaged in 3 or 5 credit bundles. Students can receive credit in a course only once.

RETROACTIVE CREDITS

Students who achieve a mark less than 50% may be able to continue at the next grade level in the other program route. In these cases, students who successfully complete the next grade level course will earn credit for the course taken and for its normal prerequisite.

For example: A student receives a 43% in Social 20-1. He would register in Social 30-2. If he passes Social 30-2, he may apply to receive credit in Social 20-2 in addition to the credit in Social 30-2.

Retroactive credits can be earned in English, Math, Social Studies, French and Science. Application must be made to the school Principal or Assistant Principal.

COURSE CHALLENGES

A student is eligible to challenge a course under these guidelines:

- the student feels he/she has the skills needed in that course to enable him/her to go on to the next level
- the student has not failed the course to be challenged
- the student is not currently registered in the course
- the student is prepared to undertake a comprehensive evaluation which may include the following components: written, oral, lab, portfolio or others as deemed necessary

Students who are interested in challenging a course should discuss this further with the Principal or Assistant Principal.

REGISTERED APPRENTICESHIP PROGRAM

The Registered Apprenticeship Program (RAP) is an apprenticeship program for high school students. Traditionally, apprenticeships in Alberta began after students graduated from high school. However, some students identify their career interests at an earlier age and are ready to get started learning and practicing their future trade while in high school. RAP is an ideal program for these students.

RAP students divide their time between an approved work site and their high school. They take regular courses, such as English language arts, social studies, science and mathematics in order to earn their Alberta High School Diploma. RAP students are both full-time students and registered apprentices.

RAP is designed to:

- improve the transition between school and the workplace
- encourage students to stay in school
- enable students to obtain on-the-job training that is recognized by employers.

More information can be found at: <http://education.alberta.ca/media/618629/rapinfoman.pdf>

WORK EXPERIENCE

Work Experience 15–25–35 are separate courses for credit that provide experiential learning activities undertaken by a student as an integral part of a planned school program under the cooperative supervision of a teacher–coordinator and employer.

Work Experience 15–25–35 courses are components of an off-campus education program. These courses, like other off-campus education courses and course components, provide opportunities for students to:

- apply, in the workplace, knowledge, skills and attitudes acquired through other course work
- discover their career interests and aptitudes in meaningful work activities, situated in community-based work stations and work sites in business, industry, government and community service.

Work Experience 15–25–35 courses, at each level, may be offered for 3, 4, 5, 6, 7, 8, 9 or 10 credits. Each course is time based; i.e., 25 hours per credit, and a student may enroll in Work Experience 35 without having completed Work Experience 15 and/or Work Experience 25.

ICSS has developed specific guidelines for the work experience program. Students who are interested should discuss this with our Off-Campus Education Coordinator.

GREEN CERTIFICATE

The Green Certificate Program is administered by Alberta Agriculture, Food and Rural Development. Alberta senior high school students, 15 years of age or older, can register in any one of the eight specializations available. Each specialization can be studied at three levels of increasing knowledge and proficiency.

The program is delivered off-campus, and students may earn credits for successfully completing a Green Certificate Program by enrolling in courses in any of the eight available Green Certificate Specializations: Cow–Calf Beef Production, Dairy Production, Feedlot Beef Production, Field Crop Production, Irrigated Field Crop Production, Sheep Production, Swine Production and Bee Keeper Production.

More information about the above programs can be obtained from our Off-Campus Education Coordinator.

Course Registration

You will receive a Course Registration Package in May. There you will find more information about how to complete the registration process.

COURSE LOAD POLICY

When selecting courses, you need to take note of the following:

- Grade 10 students are expected to fill their day with a full course load.
- Grade 11 students are expected to register for a minimum of 35 credits of on-campus courses.
- Grade 12 students are expected to register for a minimum of 35 credits of on-campus courses.

There are at least three reasons why ICSS has a course load policy. The first reason – and the most important – has to do with our philosophy of education. We believe that God has granted us a wide variety of talents and gifts and calls us to develop those talents and gifts. While attending a Christian school, our students should be encouraged to take a wide variety of courses as one of the means to develop their talents and gifts. The second reason has to do with the way in which our school is funded by the Alberta government. Students in Grades 10 to 12 are funded on a per credit basis. Essentially this means that the more credits a student takes, the more funding our school receives. In taking a full course load, our students are helping to financially sustain our school. The third reason has to do with students having too much spare time. It has been our experience that students with a lighter course load tend to spend their free time ‘hanging around’ the school with nothing to do.

There may be good reasons for not taking a full course load at ICSS and therefore exceptions to this policy may be granted upon application to the Principal or Assistant Principal.

All course selections are subject to final approval by the school. We reserve the right to cancel courses for which enrolment is too low or no instructor is available.

Course Descriptions



Religious Studies

RELIGIOUS MEANINGS 20

3 CREDITS

Accepting the idea that one of human's basic needs is the need to search for meaning in life, the course will present various ways man has and is searching. Various North American cults and world religions will be examined in contrast with the Christian faith.

CAREER AND LIFE MANAGEMENT

3 CREDITS

CALM is based on the "Living in Hope" series produced by CSI. It looks at four aspects of society. Units include Communication, Self, Troth and Work. In each unit the following basic questions are answered:

1. What does the bible teach about this aspect of society?
2. How has history and tradition shaped people's ideas and the development of this social institution?
3. What is the present state of condition of this social institution in Canadian society?
4. What changes and alternatives can Christians propose and implement, at least in part, to honour more fully the task of handing on God's reconciliation to Canadian society and the world?

CALM 20 helps students see that a reformed world view is needed if they are going to be effective Christians in society.

APPLIED SOCIOLOGY 30

3 CREDITS

This course seeks to assist students in articulating their Christian worldview so that they may be further equipped to live a life a Christian discipleship within contemporary society. To do that, this course will help them to:

1. Articulate their Christian worldview
2. Understand today's current worldviews
3. Develop Biblical responses to today's cultural issues.



English Language Arts

ENGLISH 10-1

5 CREDITS

This basic course for high school English deals with concepts of literature, writing, viewing, and speaking. Major emphasis are on various genres of literature, such as short stories, poetry, novels, Shakespearean drama, and essays. There is also emphasis on writing process in order to construct effective essays as well as other written communication. Viewing components are stressed through various videos and films which relate to curricular requirement. Some of the major units are Romeo and Juliet, Black Like Me, Guide to Modern English, The Writing Experience, and Inside Stories 1.

ENGLISH 10-2**5 CREDITS**

Some of the basic ingredients of the course of English 10-1 are also used in English 10-2. However, the material is not as complex and the situations pertain more to a practical level of living. The intent is to focus on practical writing and reading, and handling of day-to-day types of communication. There is some emphasis on grammar through Guide to Modern English, as well as reading of short stories, plays, poems from the Connections Series, the first of which is called Imaginings. There is also a unit on Shakespearean drama, Romeo and Juliet. A non-fiction work studied is Call of the Wild.

ENGLISH 20-1**5 CREDITS**

There is a continuation of studying some of the genres of literature which were introduced in English 10-1. Through Literary Experiences, Book 1, short stories are read and studied. Technical aspects of the short story are reviewed and developed to a greater level. Poetry is also studied utilizing the same text. Macbeth, a Shakespearean play, is studied and through the concept of tragedy the idea of ambition is examined. This is followed up with a selection of modern drama to draw a distinction. Grammar is reviewed and good writing techniques are stressed through the development of a major research paper. The novel, To Kill a Mockingbird, examines the problem of prejudice that is often part of our society.

ENGLISH 20-2**5 CREDITS**

This course is a continuation of English 10-2. Though some of the types of literature are studied, there is more of an emphasis on practical interpretation of the material. The second book of the Connections Series is *Relating* and again the same types of articles are used. Some novels and essays are read and discussed as is a unit on drama. While practical writing is emphasized, some interpretive writing is expected. Basic understanding of the material is demonstrated.

ENGLISH 30-1**5 CREDITS**

This course is the final stage in the high school English curriculum. A review of the major aspects of the genres of literature stresses more of the interpretive aspect of literature. It is expected that greater maturity will bring greater emphasis on analytical skills. Story and Structure examines in depth the short story while Hamlet continues in the Shakespearean mode of drama examining the tragic effects of procrastination. Sound and Sense determines a greater appreciation of poetry and a major novel is used to convey a sense of responsibility towards community and self. Writing is also a major focus of this course.

ENGLISH 30-2**5 CREDITS**

This is the grade 12 continuation of the English 10-2, 20-2 stream. At the conclusion of this course, a government examination is given to ensure that the quality and level of material is consistent with provincial regulations. The third book of the series is Discovering and focuses on discovering the adult world which the students are moving into. Practical writing, such as resumes and job related communication is stressed and discussed. While literature is also emphasized, there is a recreational reading focus to much of the work. The report, novel, poetry and drama are all read and discussed.



Social Studies

SOCIAL STUDIES 10-1

5 CREDITS

(Perspectives on Globalization) Globalization, the process by which the world's citizens are becoming increasingly connected and interdependent, demands that students explore responsibilities associated with local and global citizenship and formulate individual responses to emergent issues related to globalization. Recognizing and appreciating the influence of globalization will lead students to develop individual and collective responses to emergent issues. The key issue for the course is "To what extent should Christians embrace globalization?"

Students will explore multiple perspectives on the origins of globalization and the local, national and international impacts of globalization on lands, cultures, economies, human rights and quality of life. Students will examine the relationships among globalization, citizenship and identity to enhance skills for citizenship in a globalizing world. The infusion of multiple perspectives will allow students to examine the effects of globalization on peoples in Canada and throughout the world, including the impact on Aboriginal and Francophone communities.

SOCIAL STUDIES 10-2

5 CREDITS

(Living in a Globalizing World) By examining opportunities and challenges associated with globalization, the process by which the world is becoming increasingly connected and interdependent, students will develop awareness of the impacts of globalization. Recognizing and appreciating the influence of globalization will lead students to examine their roles as responsible and active citizens in a globalizing world.

Students will 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 peoples 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

(Perspectives on Nationalism) While nationalism has historically examined the relationship of the citizen to the state, contemporary understandings of nationalism include evolving individual, collective, national and state realities. Exploring the complexities of nationalism will contribute to an understanding and appreciation of the interrelationships among nation, nationalism, internationalism, globalization, and citizenship and identity. Developing understandings of the various points of view associated with nationalism as well as an appreciation for the perspectives of others will encourage students to develop personal and civic responses to emergent issues related to nationalism and at the same time recognize their responsibilities as citizens in the Kingdom of Heaven.

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, international and global relations. The infusion of multiple perspectives will allow students to develop understandings of nationalism and how nationalism contributes to the citizenship and identities of peoples in Canada.

SOCIAL STUDIES 20-2

5 CREDITS

*(Understandings of Nationalism)*As perspectives on personal identity continue to evolve, so do understandings of nationalism and what it means to be a member of a collective, community, state, and nation. This evolution is significant in the Canadian context as nationalism continues to shape visions of identity and nation. Understanding the significance of nationalism contributes to an appreciation and awareness of the interrelationships among nationalism, internationalism, citizenship and identity.

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

(Perspectives on Ideology) The principles of liberalism have played a significant role in the development of modern democratic societies. Developing a comprehensive understanding of the evolution of modern liberal thought and the tenets of competing ideologies is important in the development of active, informed, and responsible citizens. 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. Students will begin to understand that many liberal views which are commonly accepted may not line up with a Biblical worldview.

Students will explore the origins and complexities of ideologies and examine multiple perspectives regarding the principles of classical and modern liberalism. An analysis of various political and economic systems will allow students to assess 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.

SOCIAL STUDIES 30-2

5 CREDITS

*(Understandings of Ideologies)*Democratic and capitalist societies are founded upon the key values of individualism and liberalism. Active and responsible citizenship requires citizens to have knowledge and skills to examine, analyze, and evaluate a variety of political and economic systems. An awareness of the evolution of ideologies is key to comprehending and responding to local, national and global issues.

Students will examine the origins, values and components of competing ideologies. They will explore multiple perspectives regarding relationships among individualism, liberalism, common good and collectivism. An examination of various political and economic systems will allow students to determine 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.



Science

SCIENCE 10

5 CREDITS

Science 10 is designed to integrate the disciplines of Biology, Chemistry and Physics into one course and to prepare students with a basic understanding for future studies in each subject area. The biological section of the course allows students to discover the intricacy of God's living creation at the cellular level. Chapters covering solar energy, water and weather help students to discover how the living components of our earth depend upon non-living systems. The third unit of the course focuses on the chemical nature of all matter. Students will learn to appreciate how God has systematically designed all things down to the smallest particle of all matter known as the atom. The fourth unit focuses on the physical components of science where students will investigate how the natural laws of motion impact life on earth and how energy in its various forms allows life to exist.

SCIENCE 14

5 CREDITS

Science is the discovery and study of God's creation. Therefore, as we are "...grateful for the advances in sciences and technology, we must make careful use of their products, be on guard against idolatry and harmful research and be careful to use them in ways that answer to God's demands to love our neighbor and to take care of the earth and its creatures." (CRC Psalter Hymnal, p 1031).

This course has four modules:

1. Investigating Properties of Matter
2. Energy Transfer Technologies
3. From Life to Lifestyle
4. Matter & Energy In The Biosphere

SCIENCE 24

5 CREDITS

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This course has four modules:

1. Matter And Chemical Change
2. Energy Transforms
3. Disease Defense And Human Health
4. Safety In Transportation

BIOLOGY 20

5 CREDITS

Biology 20 will allow the learner to explore and become more knowledgeable about the natural world that God has created. The first unit of study focuses on the dynamic equilibrium that exists for both energy and matter within the biosphere. In the second unit, energy and matter exchange within the digestive, circulatory, immune, respiratory, motor and excretory systems of the body are studied. The human body is compared to other organisms by means of organ and organism dissection. In unit three, matter and energy from the environment is

traced through the reactions involved in photosynthesis and cellular respiration that make life on earth possible. Biology 20 finishes with a discussion of the diversity some of the organisms that make up the biosphere through an exploration the principles of taxonomy and binomial nomenclature. The course closes with a discussion of Darwin's theory of evolution of organisms to fill niches in those ecosystems; however considerable time will be spent on demonstrating the holes in evolutionary thought, the evidence for a sophisticated universe as created by our Lord and the intricacy of the human body as evidence for creation by design rather than genetic error.

BIOLOGY 30

5 CREDITS

Biology 30 will help the student gain a greater appreciation of God's complex and unique creation. This course focuses primarily on the structure and function of the human body, from the organ to the molecular level. The nervous and endocrine systems will be studied in detail, as well as, the process of reproduction and embryo development.. Through the study of the miracle of life, learners will gain a sense of awe and wonder for our Creator. Investigations of the cell cycle and genetics will provide a molecular understanding of how humans develop, grow and pass on hereditary information. Ethical issues that arise for Christians with regard to reproductive and genetic technologies will also be emphasized. The Biology 30 course will end with an investigation of populations and their interaction within ecosystems.

PHYSICS 20

5 CREDITS

Physics 20 is a course designed to give students a broad range of knowledge about the physical world that we live in. The course opens with a unit about kinematics, the study of how objects move. Unit two takes those ideas and expands them to the study of dynamics, the forces that cause objects to change the way that they are moving. The principles of dynamics are then extended to explain circular motion and gravitation, including the motion of planets and satellites. The course finishes with students investigating simple harmonic motion and mechanical waves by observing the motion of oscillating spring and pendulums. Waves, which are one method of transferring energy, will be studied as they related to the concepts of resonance, the Doppler effect and wave interference. Physics 20 is academically challenging and requires a good grounding in mathematics skills.

PHYSICS 30

5 CREDITS

Physics 30 is an advanced diploma exam course which takes concepts explored in Physics 20 and expands on them. Physics 30 has four units of study: momentum and impulse, forces and fields, electromagnetic radiation, and atomic physics. Most students find the discussion of atomic physics fascinating as we begin to explore both Einstein's theories on the nature of matter as well as the newest ideas of atomic structure. Although this course is academically demanding, most students enjoy the material covered as it attempts to draw all of the information together into a more unified understanding of God's creation.

CHEMISTRY 20

5 CREDITS

Chemistry 20 is an academic program that aims to help students better understand the chemical principles behind the natural events that they experience and the technology that they use in their daily lives. The course begins with a study of the intricate design behind atomic structure, chemical bonding and chemical reactions as evidence for the creative power of our heavenly Father. The course also explores the idea of both aqueous and gaseous solutions as a part of our everyday life and finishes with the study of stoichiometry, the practical math application of the theory previously studied.

CHEMISTRY 30**5 CREDITS**

This diploma exam course contains four units of study. The first concerns thermochemical changes; reaction which involves a net gain or loss of thermal energy and the applications that originate from this (ie. combustion engines). Students then learn about electrochemical changes and acid-base systems. The course finishes with a unit on organic chemistry, where students are introduced to some of the organic compounds that they come into contact with on a daily basis, as well as the importance of the fossil fuel and petrochemical industry to the economy of Alberta.

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Mathematics

The study of mathematics from a Christian perspective points us to our Creator in a very unique way. When you see the patterns and order in creation and in the laws embedded in creation, your faith is strengthened, as you know only God's hand can be behind this. Our God is faithful and unchanging God. Other attributes of God can be observed when we study topics such as probability and learn there is no such thing as chance with our all-knowing God. What a comfort this is to our lives. The study of infinity causes us to stand back in amazement at the fact that we can never truly understand the mind of God. However, we can know Him and His world in part, and mathematics helps us to take care of His world more effectively. When we study math, it is impossible to do so without studying our Creator and His creation.

The 2010 / 2011 school year will see the implementation of a new math curriculum for grade 10. The grade 11 and 12 courses will change in the following years. There will no longer be three levels offered in grade 10, there will only be two streams.

MATH 10 COMMON**5 CREDITS**

This course should be taken by all students who would previously have enrolled in Math 10 Pure or Math 10 Applied and who will either take Math 20-1 or Math 20-2 the next year. The idea behind this curriculum is to give students an extra year before they must choose a stream. Hopefully, as they mature and start to think about their future goals, they will be better able to make this decision and better able to dedicate themselves to the work required. Many universities have indicated they would accept 30-2 as a pre-requisite for more programs under the revised curriculum.

Topics: Measurement, trigonometry, exponents, radicals, polynomials, relations and functions, linear relations, systems of linear equations.

MATH 20-1**5 CREDITS**

Topics: finance, quadratic functions, polynomials and rational functions, analysis of equations and inequalities, systems of equations and inequalities, reasoning and geometry, properties of angles, circles and chords, and coordinate geometry.

MATH 30-1**5 CREDITS**

Topics: transformations, exponential functions, logarithmic functions, geometric sequences and series, conics, permutations, combinations, probability, statistics, and trigonometric functions, entities, and equations.

The above math courses are essentially Pure Math and are heavily dependent upon algebra with an emphasis on both the theory and application of the different mathematical concepts and areas studied. It is designed to emphasize the process and understanding of mechanisms behind the formulas, geometry, and problems studied.

MATH 20-2

5 CREDITS

Topics: graphs, non-linear functions, linear systems, linear programming, finance, circles, and measurement.

MATH 30-2

5 CREDITS

Topics: probability, matrices, statistics, personal finance, sinusoidal data, patterns, and vectors.

The above courses are essentially Applied Math and are dedicated to developing students mathematically by guiding them through rigorous, relevant, and meaningful mathematical experiences. It is designed to incorporate hands on activities, calculator skills and graphing, and problem solving skills in order to investigate mathematical concepts.

CALCULUS MATH 31

5 CREDITS

Calculus is for students who are currently in or have completed Math 30 Pure. It is an elective course that takes the student's knowledge and understanding of math and challenges them in an exciting new direction. It enables students to understand in much greater detail the how and why of many problem solving techniques. Because this course requires a higher level of understanding, it allows students to see more clearly the hand of God in His creation and the amazing complexity and simplicity with which He has structured the universe.

MATH 10-3

5 CREDITS

This course was previously called Math 14. The emphasis on this course is geared towards more practical life skills mathematics. Topics: direct and indirect measurement, personal finance, trigonometry, rate, percent, basic geometry, and the Pythagorean theorem.

MATH 20-3

5 CREDITS

Topics: personal finance, vehicle finance, measurement, graphics, statistics, probability, 3-D measurement, data interpretation.



Physical Education

PHYSICAL EDUCATION 10

3 CREDITS

Compulsory for all students; this course includes a wide variety of individual and team sports and strives to have the students find enjoyment in physical activity, being responsible stewards of their bodies, and interacting in a fun, safe, and God-honouring environment.

PHYSICAL EDUCATION 20

3 CREDITS

A continuation of Physical Education 10 stressing individual and team sports, their rules of competition and strategies. Team sports: soccer, rugby, ultimate Frisbee, football, ice hockey, volleyball, basketball, and softball. Individual sports: golf, badminton, gymnastics, handball, archery, racquetball, wall climbing, tennis, swimming, cycling, and track and field.

PHYSICAL EDUCATION 30

3 CREDITS

A continuation of Physical Education 20 with particular stress on individual and dual sports, including soccer, rugby, ultimate Frisbee, football, ice hockey, volleyball, basketball, and softball gymnastics, track and field, golf, badminton, gymnastics, handball, archery, racquetball, wall climbing, tennis, swimming, cycling, and track and field scuba diving, and activities and a section on first aid.



Second Languages

FRENCH 10

5 CREDITS

(Year Seven of a Nine Year Program) This course is the study of the French language, both orally and written, with units focusing on activities, shopping, vacations, and fine arts.

FRENCH 20

5 CREDITS

(Year Eight of a Nine-Year Program) This is a continuation of French 10 with units focusing on senses and feelings, close friends, fads and fashions, and consumerism.

FRENCH 30

5 CREDITS

(Year Nine of a Nine-Year Program) This is a continuation of French 20 with units focusing on the world of work, travel and tourism, and the role of the media.



Fine Arts

In the Arts, we are not teaching students to be artists, actors, or musicians, just as with Math, we don't teach students to be mathematicians. The Arts are disciplines with we use to help develop the whole person. The Arts complement other areas of studies and encourages students to challenge themselves. They help develop skills and talents that academics may miss. The elements that are found in the Arts are the same ordering and guiding principles that are in the creation around us. God loves this world that He created and we glorify Him when we celebrate and explore His creation.

ART 10 **3 CREDITS**

Students will be learning the elements and principles of design and utilizing them through the use of different Art techniques and materials. Painting, drawing, print making, sculpture and pottery are some of the techniques utilized in this course. It introduces students to different Art movements, styles, and techniques throughout the 20th or 21st century. It encourages them to learn that Art can be utilized to create or express meaning for the artist and to the one responding to Art. This course opens students to a wide range of art experience; and hopefully through Art students become more aware of how wonderful a Creator our God is.

ART 20 **3 CREDITS**

Art 20 is a continuation of Art 10 with an emphasis on individual expression and growth.

ART 30 **5 CREDITS**

This course is designed for the student to be able to show the skills they have developed over the years. They are encouraged and challenged to express themselves visually – showing who they are and what they believe, think, or feel. A number of different techniques will be explored throughout the course with students working at a higher level of personal expectation. The course includes one or two research projects with a completed art piece for each.

DRAMA 10/20/30 *[NOT OFFERED 2032/2014]* **3 / 5 CREDITS**

The goal of Drama is for students to develop skills that build confidence. Another is for students to grow as individuals through personal discovery. In the Drama class, students will be exploring different theatrical concepts and styles, as well as technical aspects of theatre.

CHORAL MUSIC 10/20/30 **5 CREDITS**

This course is designed to develop the fundamentals of good choral singing, and to give the student exposure to a wide range of choral music. The emphasis of the course is performance (3 concerts and invited guest appearances) but elements of music history and church history will also be covered. Students enrolled in this class will be encouraged to take what they have learned and make repertoire, understanding of good music, and singing technique part of their expression of faith.

INSTRUMENTAL MUSIC 10/20/30 **5 CREDITS**

This ensemble will focus on developing the essential techniques required to play at a high level. The emphasis will be to grow as a group but opportunities for individual performance will also be encouraged. The students will learn about the qualities of music through performance (3 concerts and guest appearances), listening, videos and theory. Students enrolled in this class will be able to use what they have learned as part of their expression of faith.



Career and Technology Studies (CTS)

Individualised 1 Credit Modules

The Alberta Education CTS program centers around five clusters and more than 1000 1-credit courses in 28 occupational areas. A cluster is a group of CTS courses that represent occupations with broad industry commonalities. Clusters in CTS are aligned with the National Occupational Classification (NOC) and function as an organizing tool for the CTS program:

- **BIT: Business, Administration, Finance & Information Technology**
The BIT cluster focuses on the management, marketing and use of electronic technologies to access, use and manipulate information within personal, family, workplace, community and global contexts. Students are challenged to expand their confidence, experience and skills as innovators and leaders.
- **HRH: Health, Recreation & Human Services**
The HRH cluster focuses on a vast array of challenging and rewarding careers in health care, community supports, recreation, cosmetology, food services, tourism and law.
- **MDC: Media, Design & Communication Arts**
The MDC cluster is designed to provide students the flexibility to adapt to various situations relating to design, communication and esthetics. Courses relate to art and culture, such as the performing arts, film and video, broadcasting, journalism, writing, creative design, fashion, libraries and museums.
- **NAT: Natural Resources**
The NAT cluster focuses on conservation and the sustainable use of natural resources. Students develop the motivation and commitment to work individually and collectively as private citizens and members of the workforce toward the conservation and responsible use of air, energy, forests, land, minerals, water and wildlife.
- **TMT: Trades, Manufacturing & Transportation**
The TMT cluster focuses on skills and knowledge related to the design, construction, fabrication and maintenance of a product. Courses relate to manufacturing, processing, utilities, construction, mechanics, fabrication, trades supervision, trades contracting, logistics, transportation and heavy equipment.

Within each cluster are occupational areas that contain courses related to specific areas of work. There are a total of 28 occupational areas in CTS. Each occupational area is comprised of a group of courses designed to support positive career and occupational opportunities for students. Students can explore their interests by selecting and creating personalized pathways.

Each CTS course at the introductory, intermediate or advanced level represents approximately 25 hours of instruction. Some courses require one or more prerequisites which are essential for maintaining safety standards, appropriate instructional sequencing and articulation with post-secondary programs.

Courses are organized into three levels of achievement. Levels of achievement are not indicators of grade levels. Students progressing through the levels will be expected to meet higher standards and demonstrate an increasing degree of competence in both the general and specific outcomes.

CURRENT CTS ON-CAMPUS OFFERINGS AT ICSS

INFORMATION TECHNOLOGY

As a result of men and women working, exploring, playing, and inventing in God's creation for many centuries, the electronic computer is a reality. The age in which we find ourselves can be described as post-industrial or as the information age. In the past, people were primarily active in agriculture, and later in industry. Today almost all people are affected by the Information Revolution. Information, timely and accurate information, is essential, even crucial, to farming, manufacturing, banking, education, science, medicine, and many other human endeavors.

Information Technology is taught in the Christian secondary school because computers have a profound effect on our society and culture. The invention, development, and use of computers and related technologies in modern society have affected or will affect all areas of human endeavor. Young Christian students must be equipped to effectively live in a complex, rapidly changing world. They must understand the computer's impact on life and come to a greater knowledge of the uses of this most powerful information processing tool. Students will learn to be stewardly about their time and talents, and stewardly about the application and uses of the computer. They will learn what it means to use computer technology in serving God and their fellow humans. Students can choose from any CTS information processing credits available. Word processing, spreadsheets, databases, information highway, graphics, Hypermedia and programming topics are available.

FOODS & FASHION

These subjects are taught using modules in three levels of achievement: introductory, intermediate and advanced. Modules allow for flexibility of student abilities and interests. Each module requires about 25 hours to complete and is worth 1 credit. Students may choose from Food and Fashion modules offered and work at their own pace but should complete at least 3 modules per semester, more modules can be completed however.

Choices for Fashion Studies include:

Ready, Set, Sew	Fashion Basics	Repair & Recycle
Basic Sewing with Knits	Creative Construction	Specialty Fabrics
Sewing for Others	Creating Home Decor	<i>(and others)</i>

Choices for Food Studies include:

Food Basics	Baking Basics	Snacks & Appetizers
Milk Products & Eggs	International Cuisine	Fish & Poultry
Cakes & Pastries	Meat Cookery	<i>(and others)</i>

CONSTRUCTION TECHNOLOGY

Goals:

1. Wood is one of the most common and important materials created by God in the world.
2. CTS will provide the opportunity for the student to become in contact with common woods, wood products, and tools & equipment used in making wooden products.
3. Through the fabrication of products students should gain a better understanding and stewardship of the world around them.

Aims:

1. To use time wisely
2. To work cooperatively with other students at designated work stations
3. To learn the proper use of tools
4. To learn correct safety procedures while in the shop area
5. To "read" a tape measure
6. To develop a respect for others and their work
7. To take pride in the product that is made
8. To develop proper woodworking skills in the fabrication of products
9. To formulate drawings and develop a plan of action prior to the construction of any project
10. To gain a sense of enjoyment from the I.E. program.

AUTOMOTIVE TECHNOLOGY

MEC1010: MODES & MECHANISMS

Students research, design, build and test a model of a transportation vehicle, using a simple power source, common materials and tools.

Prerequisite: None

MEC1015: MECHANICS TOOLS & MATERIALS

Students develop knowledge, skills and attitudes in the safe use of specialty hand tools, measuring tools and fasteners.

Prerequisite: None

MEC1020: VEHICLE SERVICE & CARE

Students develop the knowledge, skills and attitudes to care for and service a motor vehicle.

Prerequisite: None

MEC1040: ENGINE FUNDAMENTALS

Students investigate and describe operating principles, construction and applications of engines.

Prerequisite: None

MEC1130: MECHANICAL SYSTEMS

Students identify and describe the operating principles and applications of mechanisms used to transmit and control mechanical energy.

Prerequisite: None

MEC1160: STRUCTURES & MATERIALS

Students identify the types of materials and components used in vehicle construction.

Prerequisite: None