

# Hope Christian School

## Senior High School Courses 2015-2016

Core Courses	Credits
<b>CORE - CALM</b>	
<i>CALM is a required course for the AB Diploma</i>	
<a href="#"><u>PED0770 – Career and Life Management</u></a>	<b>3 + 1</b>
<b>CORE – English Language Arts</b>	
<i>One ELA course is required in all three high school grades. ELA 30-1 or 30-2 is required for an AB High School Diploma</i>	
<a href="#"><u>ELA1105 – 10-1</u></a>	<b>5</b>
<a href="#"><u>ELA1104 – 10-2</u></a>	<b>5</b>
<a href="#"><u>ELA2105 – 20-1</u></a>	<b>5</b>
<a href="#"><u>ELA2104 – 20-2</u></a>	<b>5</b>
<a href="#"><u>ELA3105 – 30-1</u></a>	<b>5</b>
<a href="#"><u>ELA3104 – 30-2</u></a>	<b>5</b>
<b>CORE – Mathematics</b>	
<i>Math is required in grades 10 and 11. At Grade 12 it is an option course but required for consideration for University or college</i>	
<a href="#"><u>MAT1791 – Math 10C</u></a>	<b>5</b>
<a href="#"><u>MAT1793 – Math 10-3</u></a>	<b>5</b>
<a href="#"><u>MAT2791 – Math 20-1</u></a>	<b>5</b>
<a href="#"><u>MAT2792 – Math 20-2</u></a>	<b>5</b>
<a href="#"><u>MAT2793 – Math 20-3</u></a>	<b>5</b>
<a href="#"><u>MAT3791 – Math 30-1</u></a>	<b>5</b>
<a href="#"><u>MAT3792 – Math 30-2</u></a>	<b>5</b>
<a href="#"><u>MAT3793 – Math 30-3</u></a>	<b>5</b>
<b>CORE – Physical Education</b>	
<i>Physical Education 10 with CPR is required for the AB Diploma</i>	
<a href="#"><u>PED1445 – PE 10</u></a>	<b>5</b>
<a href="#"><u>PED2445 – PE 20</u></a>	<b>5</b>
<a href="#"><u>PED3445 – PE 30</u></a>	<b>5</b>

<b>CORE – Science</b>	
<i>Science in Grades 10 and 11 is a required component for the AB Diploma. A combination of Science 14 and 10 will fulfill this requirement</i>	
<i>For students NOT requiring a specific course such as biology or chemistry or physics – it is recommended that they enroll in Science 20,30 stream which provides them with a bit of each area of study.</i>	
<u><a href="#">SCN1270 – Science 10</a></u>	5
<u><a href="#">SCN1288 – Science 14</a></u>	5
<u><a href="#">SCN2270 – Science 20</a></u>	5
<u><a href="#">SCN2231 – Biology 20</a></u>	5
<u><a href="#">SCN2796 – Chemistry 20</a></u>	5
<u><a href="#">SCN2797 – Physics 20</a></u>	5
<u><a href="#">SCN2288 – Science 24</a></u>	5
<u><a href="#">SCN3270 – Science 30</a></u>	5
<u><a href="#">SCN3230 – Biology 30</a></u>	5
<u><a href="#">SCN3796 – Chemistry 30</a></u>	5
<u><a href="#">SCN3797 – Physics 30</a></u>	5
<b>CORE – Social Studies</b>	
<i>One Social course is required in all three high school grades. Social 30-1 or 30-2 is required for an AB High School Diploma</i>	
<u><a href="#">SST1771 – Social 10-1</a></u>	5
<u><a href="#">SST1772 – Social 10-2</a></u>	5
<u><a href="#">SST2771 – Social 20-1</a></u>	5
<u><a href="#">SST2772 – Social 20-2</a></u>	5
<u><a href="#">SST3771 – Social 30-1</a></u>	5
<u><a href="#">SST3772 – Social 30-2</a></u>	5

## COURSE DETAILS

### Core - Career and Life Management

#### [PED0770 – Career and Life Management \(CALM\)](#)

Career and Life Management (CALM) is the core course for health literacy at the senior high school level in Alberta. The course is designed to help students make well-informed, thoughtful decisions and choices in all aspects of their lives and to develop behaviours and attitudes contributing to well-being and respect of self and others now and in the future. This course consists of FOUR modules: Work and Job (construct a resume, cover letter and digital portfolio); Personality (examine true colours and decision making); Love, Sex and Dating (discuss the video from Andy Stanley and the audio clip Boy Meets Girl by Louie Giglio) and Finances (budgeting, money mgmt. and mortgages). Since this course is taught with a Christian perspective we recommend that parent watch and approve the DVD before students study the “Love, Sex and Dating” component. An additional credit for CTR1010 is also available as we spend some time discussing career planning and career exploration.

*\*Prerequisite: None*

### Core - English Language Arts

#### [ELA1105 – English Language Arts 10-1](#)

English Language Arts 10-1 concentrates on the writing skills necessary for constructing literary analysis and personal responses to literature. Students will be exposed to grammar, spelling, writing techniques, poetry and a novel study. A small scripted play may be introduced at this level. Most course materials are available online but students will require access to a dictionary and thesaurus. A writer’s handbook (several will be discussed) is optional to purchase from amazon.com.

*\*Prerequisite: English 9*

#### [ELA1104 – English Language Arts 10-2](#)

English Language Arts 10-2 concentrates on the basics of everyday writing including building writing skills, self-expression, writing letters and other correspondence. Students will complete a study of basic communication skills, grammar, spelling, and essential writing skills through the study of short stories, poetry, a novel and either a play or a film study.

*\*Prerequisite: English 9*

### [ELA2105 – English Language Arts 20-1](#)

English Language Arts 20-1 builds on the skills taught in English 10-1 and expands into different types of writing including narrative, comparative, critical, and descriptive. The emphasis is writing critical analysis' to the standard that is required for the grade 12 diploma. Students study Macbeth, poetry, short stories, a film, and a novel of their choice in the literary project format.

*\*Prerequisite: English 10-1*

### [ELA2104 – English Language Arts 20-2](#)

English Language Arts 20-2 builds on the communication skills learned in English 10-2 by exploring other forms of writing including technical writing, resumes, cover letters, memos, etc. Students will study a novel of their choice in the form of a literary project, short stories, lyrics, a modern play and a film study. Emphasis is placed on reading, grammar, spelling and becoming a confident communicator in today's world.

*\*Prerequisite: English 10-2*

### [ELA3105 - English Language Arts 30-1](#)

English Language Arts 30-1 is the final course in the academic series that normally leads to university programs. Students study short stories, poetry, Hamlet, a film and a novel. Students will further hone their writing skills through self-expression in the form of personal responses and critical analysis. Grammar, spelling and increasing vocabulary usage will be emphasized.

*\*Prerequisite: English 20-1*

### [ELA3104 - English Language Arts 30-2](#)

English Language Arts 30-2 will continue to hone the students' communication skills including expression through non-fiction or novel study, film study, a modern play, lyrics, short stories and visual compositions. Students will continue to build their reading and analysis skills, interpretive skills and if time warrants they will experiment with multimedia presentations.

*\*Prerequisite: English 20-2*

## Core - Mathematics

### [MAT1791 - Mathematics 10-C](#)

Mathematics 10C is based on the Alberta Education Program of Studies. It is the first high school math course in the sequence designed for students with interest and aptitude in mathematics and considering post-secondary studies. Topics covered are Measurement, Trigonometry, Exponents & Radicals, Polynomials, Functions & Relations, Linear Equations, and Linear Systems. This course is a prerequisite for Mathematics 20-1 and 20-2.

*Prerequisite: Mathematics 9*

### [MAT1793 - Mathematics 10-3](#)

Mathematics 10-3 is based on the Alberta Education Program of Studies. It is the first high school math course in the sequence designed for students with interest and aptitude for workplace and apprenticeship program Mathematics. This course is a pre-requisite for Math 20-3, and Mathematics 30-3. Topics: Money and Personal Finances, Measurement, Geometry, Right Triangles and Trigonometry. Algebra is a component of all topics in the course.

*Prerequisite: Mathematics 9*

### [MAT2791 - Mathematics 20-1](#)

Mathematics 20-1 is based on the Alberta Education Program of Studies. It is the second course in the sequence designed for students with interest and aptitude in mathematics and considering post-secondary studies in most colleges and universities. The course is a prerequisite for Mathematics 30-1. The course may also be used as a prerequisite for Mathematics 30-2. Topics: Series and Sequences, Trigonometry, Quadratics, Radicals, Rational Expressions & Equations, Absolute Values & Reciprocals, and Equations & Inequalities.

*Prerequisite: Mathematics 10-C*

### [MAT2792 - Mathematics 20-2](#)

Mathematics 20-2 is based on the Alberta Education Program of Studies. It is the second course in the sequence designed for students with interest and aptitude in mathematics and considering post-secondary studies in most colleges and some universities. The course is a prerequisite for Mathematics 30-2. For further guidance in selection between 20-1 or 20-2, contact the post-secondary institutions. Units: Radicals, Quadratic Functions, Logic and Reasoning, Geometry, Proportional Reasoning, and Statistics.

*Prerequisite: Math 10-C*

### [MAT2793 - Mathematics 20-3](#)

Mathematics 20-3 is based on the Alberta Education Program of Studies. It is the second high school math course in the sequence designed for students with interest and aptitude for workplace and apprenticeship program Mathematics. This course is a prerequisite for Math 30-3.

Topics: Personal Finances, Surface Area, Volume, Capacity, Trigonometry and Slope, Representing 3D Objects Visually. Algebra and Statistics are included in all topics in the course.

*Prerequisite: Math 10-3*

### [MAT3791 - Mathematics 30-1](#)

Math 30-1 is a pre-calculus course. It is advised that students considering taking Math 30-1 consult the post-secondary program, that they wish to enter, to ensure that Math 30-1 is the requirement. The curriculum in Math 30-1 is designed for those students who are specifically entering a math related field that focuses on Calculus.

*Prerequisite: Mathematics 20-1*

### [MAT3792 - Mathematics 30-2](#)

Mathematics 30-2 is based on the Alberta Education Program of Studies. It is the final course in the sequence designed for students who want to attend a university, college, or technical institute after high school, but do not need calculus skills. If you are considering post-secondary fields such as arts, civil engineering technology, medical technologies, or some apprenticeship programs, you should take Mathematics 30-2.

Topics: Set Theory, Counting Methods, Probability, Rational Expressions & Equations, Polynomial Functions, Exponential Functions, Logarithmic Functions, and Sinusoidal Functions.

*Prerequisite: Mathematics 20-2*

### [MAT3793 - Mathematics 30-3](#)

Mathematics 30-3 is based on the Alberta Education Program of Studies. It is the third high school math course in the sequence designed for students with interest and aptitude for workplace and apprenticeship program Mathematics.

Topics: Probability, Statistics, Measurement, Trigonometry, Geometry and Business Plans. Algebra and Games are included in all topics in the course.

*Prerequisite: Mathematics 20-3*

## Core - Physical Education

### [PED1445 - Physical Education 10](#)

Physical Education 10 (5 credits) enables students to develop the knowledge, skills, and attitudes necessary to lead active, healthy lifestyles. Students are required to participate in selected activities from all five dimensions of the PE curriculum: Dance, Games, Gymnastics/Flexibility, Alternative Environment, and Individual Activities. Additionally, students are required to obtain certification in Heart Saver CPR (Cardiopulmonary Resuscitation). Any additional costs incurred to meet the requirements of each dimension are the responsibility of the participant.

Participants in Physical Education 10 must be supervised by individual(s) over the age of 18 who have expertise in that area (ie, coach, lifeguard, fitness instructor). The supervisor is responsible to ensure the activities are completed in adherence to The Safety Guidelines for Physical Activity in the Alberta Schools manual and to assess the student's competency in each activity. Family members are allowed to supervise a maximum of 25 hours, as long as they are qualified to do so. There is no final exam.

*Prerequisite: None*

### [PED2445 - Physical Education 20](#)

Physical Education 20 expands on student's development of the knowledge, skills, and attitudes necessary to lead active, healthy lifestyles. Students are required to participate in various activities from three of the following five dimensions from the PE curriculum: Dance, Games, Gymnastics/Flexibility, Alternative Environments, and Individual Activities. Participants in Physical Education 20 are required to be supervised by a responsible adult during all activities. As well, students are required to have a minimum 50% of their activities supervised by a qualified individual (ie, coach, lifeguard, fitness instructor). The supervisor(s) is responsible to ensure the activities are completed in adherence to The Safety Guidelines for Physical Education in Alberta Schools manual, as well as to assess student's competency in each activity. Students will develop a better understanding of quality goal setting practices, take part in a healthy eating/nutrition dimension, and volunteer/coach within their community. There is no final exam.

*Prerequisite: Physical Education 10*

### [PED3445 - Physical Education 30](#)

The aim of Physical Education 30 online is to enable individuals to develop the knowledge, skills and attitudes necessary to lead an active, healthy lifestyle. Students are required to participate in selected activities from all five dimensions of the PE curriculum: Dance, Games, Gymnastics/Flexibility, Alternative Environment, and Individual Activities. Students will complete a minimum 75 activity hours, as well as five volunteer hours in a physical activity or sports setting.

Participants in Physical Education 30 must be supervised by individual(s) over the age of 18 who have expertise in that area (ie, coach, lifeguard, fitness instructor). The supervisor is responsible to ensure the activities are completed in adherence to The Safety Guidelines for Physical Activity in the Alberta Schools manual. Students will be required to complete monthly logs with reflections, five projects throughout the course, as well as participate in sharing boards. There is no final exam.

*Prerequisite: Physical Education 20*

## **Core - Biology**

### [SCN2231 – Biology 20](#)

Biology 20 studies four major topics: 1) Energy and Matter Exchange in the Biosphere, 2) Ecosystems and Population Change, 3) Photosynthesis and Cellular Respiration, and 4) Human Systems.

*Prerequisite: Science 10*

### [SCN3230 – Biology 30](#)

Biology 30 includes a study of the nervous system, hormones and control, reproduction and human development, cell division and classical genetics, heredity and molecular genetics, population dynamics, and populations and communities. Students will be required to write a government diploma exam worth 50% of their final mark in this course.

*Prerequisite: Biology 20*



## Core - Chemistry

### [SCN2796 – Chemistry 20](#)

Chemistry 20 is composed of four units: Chemical Bonding - explaining the diversity of matter; Gases as a Form of Matter; Solutions, Acids, and Bases; and Quantitative Relationships in Chemical Changes.

*Prerequisite: Science 10*

### [SCN3796 – Chemistry 30](#)

Chemistry 30 is composed of four units that involve the study of thermochemistry, electrochemistry, organic chemistry, and equilibrium. Students will be required to write a government diploma exam worth 50% of their final mark in this course.

*Prerequisite: Chemistry 20*

## Core - Physics

### [SCN2797 – Physics 20](#)

Physics 20 studies Kinematics, Dynamics, Circular Motion & Gravitational and Mechanical Waves.

*Prerequisite: Science 10*

### [SCN3797 – Physics 30](#)

Physics 30 studies four major topics: 1) Momentum and Impulse, 2) Forces and Fields, 3) Electromagnetic Radiation, and 4) Atomic Physics. Laboratory work is not required. Learning outcomes are covered by online simulations. Optional Diploma Exam preparation resources are available. Students will be required to write a government diploma exam worth 50% of their final mark in this course.

*Prerequisite: Physics 20*

## Core - Science

### [SCN1270 – Science 10](#)

Science 10, the first course in the academic sequence, provides students with opportunities to explore, analyze, and appreciate the interrelationships among science, technology, society, and the environment. Topics studied in Science 10 include Energy and Matter in Chemical Change, Energy Flow in Technological Systems, Cycling of Matter in Living Systems, and Energy Flow in Global Systems. Students develop understandings that affect their personal lives, careers, and futures.

*Prerequisite: Science 9*

### [SCN1288 – Science 14](#)

Science 14 is the first of the 14-24 general science series satisfying science requirements of a high school diploma. The four modules are sequential: Module 1 - Investigating Properties of Matter, Module 2 - Energy Transfer Technologies, Module 3 - From Life to Lifestyle, and Module 4 - Matter and Energy in the Biosphere. Science 14 contains several investigations from which students build their knowledge and understanding of concepts. Most investigations can be completed using common household materials.

*Prerequisite: Science 9*

### [SCN2270 – Science 20](#)

Science 20 has four units: Chemical Change, Changes in Motion, The Changing Earth, and Changes in Living Systems.

*Prerequisite: Science 10*

### [SCN2288 – Science 24](#)

Science 24 completes the general science 14-24 series satisfying science requirements of a high school diploma in four sequential modules: Module 1 - Matter and Chemical Change, Module 2 - Energy Transformations, Module 3 - Disease Defence and Human Health, and Module 4 - Safety in Transportation. This course contains several investigations from which students build their knowledge and understanding of science concepts. Many investigations can be completed using common household materials.

*Prerequisite: Science 14 or Science 10*

### [SCN3270 – Science 30](#)

Science 30 has four units: Maintaining Health, Chemistry and the Environment, Electromagnetic Energy, and Energy and the Environment. Students will be required to write a government diploma exam worth 50% of their final mark in this course.

*Prerequisite: Science 20*

## **Core – Social Studies**

### [SST1771 – Social Studies 10-1](#)

Social Studies 10-1: Perspectives on Globalization is the first course in the -1 stream for students with interest and aptitude in Social Studies. Students explore multiple perspectives on the origins of globalization and the impact of globalization on identity, lands, cultures, economies, human rights, and quality of life. They also examine the relationships among globalization, citizenship, and identity to enhance skills for citizenship in a world in which all people are increasingly interconnected and interdependent.

*Prerequisite: Social Studies 9*

### [SST1772 – Social Studies 10-2](#)

Social Studies 10-2: Living in a Globalizing World is the first course in the -2 stream for students who want to achieve the basic Social Studies requirements. Students explore multiple perspectives on the origins of globalization and the impact of globalization on identity, lands, cultures, economics, human rights, and quality of life. They also examine the relationships among globalization, citizenship, and identity to enhance skills for citizenship in a world in which all people are increasingly interconnected and interdependent.

*Prerequisite: Social Studies 9*

### [SST2771 – Social Studies 20-1](#)

Social Studies 20-1: Perspectives on Nationalism is the second course in the -1 stream for students with interest and aptitude in Social Studies. Students explore the complexities of nationalism starting with the origins of our great nation and travelling through time to explore nationalism in the context of Canada's role with other nations. The course includes study of the origins of nationalism and the influence of nationalism on regional, international, and global relations. The infusion of multiple perspectives allows students to develop understandings of nationalism and how nationalism contributes to the citizenship and identities of peoples in Canada. Students are expected to listen to and interact with the current happenings in the world today through social media or news websites.

*Prerequisite: Social Studies 10-1*

[SST2772 – Social Studies 20-2](#)

Social Studies 20-2: Understandings of Nationalism is the second course in the Alberta High School Social Studies curriculum. It encourages students to explore key issues by investigating related issues. The key issue focuses on “To what extent should we embrace nationalism?” This examines the historical and contemporary understanding of nationalism in Canada and the world. The origins and impacts of nationalism on individuals and communities are explored using examples of nationalism, ultra-nationalism, supra-nationalism, and internationalism examined from multiple perspectives. Topics of study include the French Revolution, World War I, ultra-nationalism in Nazi Germany, and the development of foreign policy in the Global Village. Students are encouraged to develop personal and civic responses to emergent issues related to nationalism.

*Prerequisite: Social Studies 10-2 or Social Studies 10-1*

[SST3771 – Social Studies 30-1](#)

Social Studies 30-1, the final course in the 10-1, 20-1 and 30-1 series, explores the perspectives of ideologies and examines the spectrums within the political and economic environments. Students will examine the concept of classical liberalism and contrast it with the ideology of socialism and examine different countries and leaders historical and present ideologies in respect to the spectrums. A huge emphasis will be placed on current events and the examination of world changing events such as the Cold War, the Vietnam war and 9-11 to name of few. Students will focus on their interpretation and dissection of the events studied and their relationship to liberalism. Students will be required to write a government diploma exam worth 50% of their final mark in this course.

*Prerequisite: Social Studies 20-1 or Social Studies 30-2*

[SST3772 – Social Studies 30-2](#)

Social Studies 30-2, the final course in the 10-2, 20-2 and 30-2 series, the perspectives of ideologies and examines the spectrums within the political and economic environments. Students will examine the concept of classical liberalism and contrast it with the ideology of socialism and examine different countries and leaders historical and present ideologies in respect to the spectrums. A huge emphasis will be placed on current events and the examination of world changing events such as the Cold War, the Vietnam war and 9-11 to name of few. Students will focus on their understanding of the events studied and how they have helped from the world we are presently living in. Students will be required to write a government diploma exam worth 50% of their final mark in this course.

*Prerequisite: Social Studies 20-2 or Social Studies 20-1*