








Senior High (Grades 10-12)

Academic Guide 2026-2027

One of the top independent schools in Atlantic Canada, Sacred Heart School of Halifax teaches the whole child - mind, body, spirit. Our iconic campus in the heart of Halifax offers a diamond model of education — co-ed education for JP-Grade 6 and Grades 10-12 and single-gender education for Grades 7-9. With a global network of schools around the world, a rich and proud history, and a strong and unique set of core values, we offer not just an education but an experience that is unparalleled in this region. Our academic reputation is stellar, and our CAIS (Canadian Accredited Independent Schools) accreditation is a guarantee of excellence for both parents and students.

The goals of the school are to educate to:

-  A personal and active faith in God
-  A deep respect for intellectual values
-  A social awareness which impels to action
-  The building of community as a Christian value
-  Personal growth in an atmosphere of wise freedom



Requirements for a Sacred Heart Graduation Diploma..... 4

The Advanced Placement Program at Sacred Heart..... 5

 AP Capstone Diploma..... 5

 AP Capstone Diploma Requirements..... 5

 Advanced Placement offerings for the 2026-27 School Year..... 5

COURSE DESCRIPTIONS..... 6

 English..... 6

 English 10..... 6

 AP Seminar (counts as English 10 credit)..... 6

 English 11..... 7

 AP English Language and Composition 11..... 7

 AP Seminar 11 (elective)..... 7

 English 12..... 8

 AP English Language and Literature 12..... 8

 English As An Additional Language..... 9

 EAL 10-11..... 9

 EAL 12..... 9

 Fine and Performing Arts..... 10

 Performing Arts 10 (Drama)..... 10

 Grade 10 Music..... 10

 Grade 10 - Fine and Visual Art..... 10

 Drama 11..... 10

 Band (10, 11 and 12)..... 11

 Languages: French..... 13

 French 10..... 13

 French 10 (Advanced)..... 13

 French 11..... 13

 French 11 (Advanced)..... 14

 French 12..... 14

 AP French 12..... 14

 Languages: Spanish..... 15

 Spanish 10..... 15

 Spanish 11..... 15

 Mathematics..... 17

 Mathematics 10..... 17

 Mathematics 10 (Advanced)..... 17

 The Grade 11 Program..... 17

 Mathematics 11..... 18

 Mathematics 11 (Advanced)+Precalculus 11 (Advanced)..... 18

 Mathematics 11+Pre-Calculus 11..... 18



Mathematics 12.....	18
Pre-Calculus 12.....	19
AP Pre-Calculus 12 (Advanced).....	19
Calculus 12.....	19
AP Calculus 12.....	20
Physical Education.....	21
Physical Education 10.....	21
Fitness Leadership (PE) 11/12.....	21
Religious Studies.....	22
Grade 10.....	22
Grade 11.....	22
Grade 12.....	22
Science.....	23
Science Prerequisites.....	23
Science 10.....	24
Science 10 (Advanced).....	24
Biology 11.....	24
Biology 12.....	24
AP Biology 12.....	25
Chemistry 11.....	25
Chemistry 11 (Advanced).....	25
Chemistry 12.....	25
Chemistry 12 (AP).....	26
Oceans 11.....	26
Physics 11.....	26
Physics 11 (Advanced).....	26
Physics 12.....	26
Physics 12 (AP).....	26
Social Studies.....	28
History 10.....	28
History 11.....	28
European History 11 (Advanced).....	28
History 12.....	28
AP European History 12 (Advanced).....	28
Economics 11.....	29
Sociology 12.....	29
Global Politics 12.....	29
Technology.....	30
Technology 10.....	30
University Prep Program.....	31

Requirements for a Sacred Heart Graduation Diploma

At each grade, the requirement is met with either the regular or advanced course. For example, a student taking Chemistry 11 meets the requirement for their science course, as does a student taking Chemistry 11 Advanced.

Required	Course(s)	Credits
3	English 10,11,12	3
3	Math 10,11,12	3
3	History 10,11,12	3
3	Science 10, then a minimum of 2 more of courses in Biology, Chemistry, Physics, Design and Technology	3 or more
1	One Grade 10 Arts credit (Visual, Performing, Music)	1
3	Religious Studies 10, 11,12	Must take each year. Each course has a weighting of 0.5 credits, except Gr. 12 which has a weighting of 1.
2	Languages (French or Spanish in Grades 10, 11, 12)	2
1	Physical Education 10	1
0	University Prep 10, 11, 12	Students must take University Prep each year it is offered.
3-6	Electives (these courses are often used to meet post-secondary entrance requirements).	Can be an extra language course, Social Studies course, Science course, Arts credit (if offered), Math course, One Schoolhouse, etc.

These requirements fulfill the Sacred Heart Graduation requirements, but may or may not meet the requirements for a specific post-secondary program. *Students and their families should make sure that the requirements for their desired post-secondary pathway are met with their course selections.*

Students who complete our full three-year Senior program will typically graduate with 22-24 credits.

The Advanced Placement Program at Sacred Heart

Sacred Heart School of Halifax is pleased to offer Advanced Placement (AP) courses to students in the Senior High. They offer an advanced challenge to our students, promoting academic excellence and rigour while giving students flexibility and choice in choosing the AP courses that they wish.

AP Capstone Diploma

As a school, we are working towards offering the AP Capstone Diploma. To achieve this diploma, the following courses must be completed at the AP level, with AP Exam scores of 3 or higher:

AP Capstone Diploma Requirements

1. AP Seminar
2. AP Research (Gr. 12)
3. 4 other AP classes

*All classes must achieve the exam score of 3 or higher to qualify for the Capstone Diploma

Advanced Placement offerings for the 2026-27 School Year

AP Seminar: English 10

AP English Language and Composition (Gr. 11)

AP English Literature and Composition (Gr. 12)

*AP Biology *new*

AP Chemistry

AP Physics 1

AP Calculus AB

AP Precalculus

AP European History

AP French Language and Culture

AP Research (Coming in 2027-28)

***Students may also complete AP Exams and courses independently. Please see Mr. Pinches for more details.

COURSE DESCRIPTIONS

English

Students in grades 7 through 12 develop their reading, writing, listening, speaking, creative- thinking, and research skills in English classes. They engage with novels and plays through reading, re-reading, and interpretation, while also creating their own texts, including essays, short stories, and poetry. Additionally, they explore nonfiction, advertisements, and persuasive speeches, developing both their analytical and creative abilities as critical consumers and producers of these texts. Each year, students study at least one classic work of fiction, most often by Shakespeare. Film studies are also incorporated to deepen understanding and reinforce key concepts. Beyond assigned readings, students are expected to read independently and are encouraged to explore a wide range of texts based on their interests.

While the English program integrates technology and various media, active classroom participation remains a priority. When possible, students attend theatre productions and engage with guest speakers, authors, and writers who share their expertise. Writing workshops led by professionals are also regularly available to interested students.

Assessment is ongoing and includes oral, visual, and creative components alongside expository writing assignments, ensuring a comprehensive evaluation of student growth and understanding.

English 10

The Grade 10 English course develops students' critical thinking skills and deepens their understanding of how literature shapes perspectives. By analyzing writers' choices, students examine the structure and characteristics of various genres, including novels, plays, poetry, short stories, and persuasive non-fiction. They strengthen their communication skills through presentations, close reading, and both expository and creative writing. The course prioritizes clarity in thinking, speaking, and writing, with practice in grammar and vocabulary expansion. Through engagement with diverse and meaningful texts, students cultivate an appreciation for powerful writing while refining their ability to express ideas effectively.

AP Seminar (counts as English 10 credit)

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. The course aims to equip students with the skills to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments. Using an inquiry framework, students learn to engage and analyze a variety of sources, including: articles and research studies; literary, foundational, and philosophical texts; speeches, broadcasts, and personal accounts; artistic works and

performances. Students synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. These essays, presentations, and oral defenses completed during the academic year are known as AP Seminar Performance Tasks, which are project-based assessments and contribute to the overall AP Seminar score. AP Seminar counts as the English 10 credit. Students should have a minimum final grade of 85% in Grade 9 English.

English 11

In the Grade 11 English course, students explore a wide range of literature, including novels, short stories, speeches, poetry, drama, and non-fiction. They develop analytical skills by examining key literary features and techniques, enhancing their ability to deconstruct texts and understand authorial intent. Through creative writing, literary responses, and expository essays, students refine their writing skills while also strengthening their comprehension, research, and presentation abilities. The course fosters confidence in both written and oral communication, encouraging students to think critically and articulate their ideas effectively.

AP English Language and Composition 11

Advanced Placement (AP) English 11 Language and Composition is an advanced course designed for motivated students with a strong enthusiasm for English. It challenges students to think critically, develop analytical and rhetorical skills, and communicate with precision, all while deepening their appreciation for the power and beauty of language. Through the study of non-fiction and fiction, students explore how writers use language to engage audiences and refine their own writing through drafting and revision. Coursework includes essays, articles, drama, novels, poetry, and other reading assignments, strengthening comprehension, literacy, writing, research, and oral presentation skills. Usage and vocabulary are studied in context regularly. This course also prepares students for the AP Language and Composition exam in May. Prerequisite: English 10 with an average of 85%, AP Seminar, or teacher permission.

AP Seminar 11 (elective)

As we move towards becoming an AP Capstone school, students who did not choose to take AP Seminar in Grade 10 can take it in 2026-27 as an elective. Students must still register for an English class. AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. The course aims to equip students with the skills to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments. Using an inquiry framework, students learn to engage and analyze a variety of sources, including: articles and research studies; literary, foundational, and philosophical texts; speeches, broadcasts, and personal accounts; artistic works and

performances. Students synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. These essays, presentations, and oral defenses completed during the academic year are known as AP Seminar Performance Tasks, which are project-based assessments and contribute to the overall AP Seminar score. Students should have scored a minimum grade of 85% or higher in Grade 10 English.

English 12

In the Grade 12 English course, students study and appreciate a range of literary works, including world classics and contemporary fiction. They explore various genres—drama, poetry, short stories, and novels—while developing critical thinking and analytical skills. Students complete formal written assignments, including expository essays and creative or dramatic interpretations, alongside opportunities for both formal and informal oral presentations. The course emphasizes expanding comprehension, refining writing clarity, and strengthening research and presentation abilities. Usage and vocabulary are studied regularly to enhance communication skills and literary analysis.

AP English Language and Literature 12

The Advanced Placement (AP) English Literature and Composition course offers an in-depth study of literature, encouraging students to engage critically and thoughtfully with a wide range of texts. By exploring drama, poetry, novels, essays, and articles, students deepen their analytical skills and refine their appreciation of literary expression. Through formal writing assignments, research, and oral presentations, they strengthen their communication abilities while preparing for the AP Literature and Composition exam in May. Prerequisite: AP English 11 or teacher permission.

English As An Additional Language

The EAL Program is for students from primary to grade 12 who are learning English as a second or additional language. The EAL Program allows students to focus on curriculum content, language skills, and learning strategies. Following a language assessment, students work closely with a certified EAL teacher and are given the EAL support they require to work toward academic success. Students will attend small group EAL classes. The main goal of the EAL Program is to help students develop their English language and academic skills and to feel comfortable in the Sacred Heart School learning environment.

*****Admission to EAL classes requires a language assessment.**

EAL 10-11

EAL 10 and 11 are credit classes. In EAL 10 and 11 students develop their listening, speaking, reading and writing skills through course content as well as through EAL materials. Students are introduced to a variety of language learning strategies to improve their reading and listening comprehension, writing, vocabulary acquisition, and grammatical accuracy. Students practice and receive support with a variety of academic tasks; for example, doing research, writing essays, stories and poems, creating and delivering presentations, and preparing for tests and exams. An important element of EAL classes is addressing the specific needs of individual students. In EAL 11, students routinely are given support preparing for the IELTS test. An important element of all EAL classes is addressing the specific needs of individual students.

EAL 12

EAL 12 is a non credit class. In EAL 12, students develop their listening, speaking, reading and writing skills through course content as well as through EAL materials. Students are introduced to a variety of language learning strategies to improve their reading and listening comprehension, writing, vocabulary acquisition, and grammatical accuracy. Students practice and receive support with a variety of academic tasks; for example, doing research, writing essays, stories and poems, creating and delivering presentations, and preparing for tests and exams. If needed, EAL 12 students are given support preparing for the IELTS test. All EAL 12 students receive support with their university applications. An important element of EAL classes is addressing the specific needs of individual students.

Fine and Performing Arts

Performing Arts 10 (Drama)

This is a course that completes the required Arts credit for High School graduation. The aim of this course is to help students develop the skills necessary to become effective communicators in today's world. The performing arts curriculum will include creating, performing and responding to activities that cover a variety of topics; including (but not limited to) theatre history, storytelling, character creation and development, memorization, creating scripts of various sizes and to meet various needs, role scoring, monologues, voice projection, body and posture, non-verbal communication, diction, scene work, improvisation, facial and vocal expression, and producing a finished work.

Grade 10 Music

This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop their understanding of musical conventions, practices, and terminology and apply the elements of music in a range of activities. They will also explore the function of music in society with reference to the self, communities, and cultures.

Grade 10 - Fine and Visual Art

The visual arts curriculum will include drawing and painting with subject matter based on specific art styles, artistic periods, and individual artists (past and present). This will give the students interested in Fine Arts a chance to explore and develop their individual style. This is achieved through a series of independent studio projects, based around a specific theme, and is documented, critiqued, and explored. This course is 100% classroom-based studio work with the expectation of six finished pieces, 3 presented in November and the other 3 presented in May, for grading.

Drama 11

This course builds on the learning experiences provided through the Drama 10 course and focuses on the students' personal development. Students will develop skills in performance, exploration of dramatic texts, and creative expression. Through both theory and practical activities, students will build their understanding of the art of theatre. They will learn essential techniques in acting, improvisation, character development, and production elements, while also gaining exposure to various dramatic styles and genres. The course will foster both individual expression and collaborative creativity in a supportive classroom environment.

****Please note that the course will operate primarily outside of the normal school hours, and involve numerous evenings in preparation for the School's theatrical and musical productions. It is expected that students will***

participate in the fall/winter production and the spring Senior Musical as part of the course. Students entering Grade 12 may also consider taking this course. Please see Mr. Pinches for information.

Band (10, 11 and 12)

Band at Sacred Heart School of Halifax may be taken as an optional credit course for students in Grades 10–12 who meet the following prerequisites: completion of Grade 6–9 Band at Sacred Heart School or the equivalent at another school or through private instruction. Students must be enrolled in the Senior Band program of two regular Band instruction classes per week along with one additional regularly-scheduled Sacred Heart performance class for a total of three performance classes each week. While students are encouraged to participate in private lessons or other All-City or community music ensembles outside of school, the additional performance class must be selected from the following:

- SHSH Jazz Ensemble
- SHSH Senior Choir
- Another newly offered SHSH performance opportunity that meets the requirements
- In special circumstances with permission of the instructor, a rigorous and demanding extracurricular performance situation

The Grade 10-12 Band course is based on active participation, effort, and applied skill development, which ultimately culminates in concert performances. Students are introduced to a diverse assortment of musical material including exercises, studies, popular music, and some of the world's finest music literature. Band members gain an appreciation for a wide variety of musical styles while improving their individual instrument and ensemble skills.

Band 10

Students review previously known Major and Minor Scales (Rudiments for Percussion). New scales with variations such as arpeggios etc. are introduced, along with melodic and rhythmic exercises. Full Band arrangements are introduced and assigned as repertoire work. It is expected that students will practice assigned material on their own for homework. At the end of each term, students must sign up for a private 15-minute applied skills practical exam. Students are tested on selected scales, exercises, with the main focus on excerpts from repertoire covered in class.

Band 11

Students are introduced to new Major and types of Minor Scales: natural, harmonic, and melodic etc. (Rudiments for Percussion). More complex melodic and rhythmic exercises and studies are introduced along with new musical terms and signs. In addition to new Full Band arrangements, instrument specific solos, duets & trios etc., may also be assigned. It is expected that students will be able to identify, understand, and perform this material during the applied skills practical exam and in concert

performances. Students will have some individual choice regarding selected test material.

Band 12

Students are introduced to new types of scales: chromatic, whole tone and modes etc., as well as increasingly complex melodic, rhythmic, and articulation applications.. New Full Band arrangements with possible instrument-specific or small-group ensembles are introduced as repertoire. Additional activities for enrichment may include research into background information, music history, theory studies, conducting and mentoring opportunities. Test material may include sight reading of new music, exercises, or studies.

Languages: French

French students from Grades 10- 12 in the Academic and Advanced streams are studying a curriculum that is based on the CEFR (European standards) and NS Curriculum.

Registered Gr 12 students will be well-prepared for superior levels of the DELF Exam (B1 or B2) and with feedback from their teacher, may choose their level of exam in the winter of Grade 12, typically written in April of Grade 12. Only registered Grade 12 French students are invited to sit the DELF Exam with the school program. Advanced Grade 12 AP students are also encouraged to write the AP French Language and Culture Exam in May.

French 10

The Grade 10 Academic French course marks a transition from junior high French to secondary-level academic study of the language. The course begins with a review of key concepts from the junior high program to ensure students have a solid foundation in previously learned vocabulary and structures, including the use of present, past, and future tenses. Instruction is organized around thematic units that allow students to deepen their understanding of grammar, vocabulary, and sentence structure while applying them in meaningful, authentic contexts. Students are encouraged to communicate with greater accuracy, complexity, and independence, with particular emphasis on spontaneous oral interaction in French. Through exposure to a range of texts, media, and classroom activities, students develop their ability to express and justify opinions, narrate past experiences, and engage in extended exchanges, while also exploring cultural perspectives from the Francophone world. Preparation at this level continues to support students' long-term readiness for the DELF French Language Proficiency Exam in Grade 12.

French 10 (Advanced)

This Grade 10 course is designed for students who have succeeded in junior high French and who are looking for further challenges. The main goal of this course is to help students improve and develop their French oral, listening, reading, and comprehension skills. Emphasis is placed on oral work through activities such as individual and group presentations, role play, and in-depth classroom discussions. Students study relevant themes such as artificial intelligence and migration and also read a Québécois and French graphic novel. Preparation begins at this level for the DELF B1 exam based on the European Framework of Languages to ensure that students are well prepared for the DELF French Language Proficiency Exam in Grade 12.

French 11

This course is designed to continue to develop students' proficiency in French with a particular focus on oral production. Students are exposed to a variety of authentic French resources (websites, videos, news

clips...) and are expected to give short oral presentations and complete written assignments based on different aspects of francophone culture. Students do several presentations on current events, read the complete novel *Le Petit Prince* by Saint-Exupéry, and also undertake a unit on the brain and learning. Preparation continues at this level for the DELF B1 exam based on the European Framework of Languages to ensure that students are well prepared for the DELF French Language Proficiency Exam in Grade 12.

French 11 (Advanced)

French 11 Advanced is designed for students seeking a more in-depth and academically rigorous study of French. Students further develop accuracy, complexity, and autonomy in their language use, with a strong emphasis on sustained oral interaction and advanced written expression. Instruction includes a systematic review and expansion of grammatical structures, including commonly used verb tenses and more complex forms such as the subjonctif, plus-que-parfait, conditionnel passé, futur antérieur, and passé littéraire. Students engage with authentic French media and are encouraged to independently access French-language resources beyond the classroom. Through oral presentations, discussions, short written texts, and creative projects such as writing and performing short plays, students broaden their understanding of Francophone culture while refining their communicative skills. Preparation at this level continues to support students' readiness for the DELF French Language Proficiency Exam in Grade 12.

French 12

This Grade 12 course is designed to consolidate and deepen students' proficiency in French while preparing them for success on the DELF French Language Proficiency Exam. The course includes a comprehensive review and reinforcement of grammar and vocabulary studied in previous years, with continued work on a range of verb tenses and advanced structures such as plus-que-parfait, the futur antérieur, the passé littéraire, the subjonctif and the conditionnel passé. The class also has the opportunity to learn practical, new vocabulary through oral presentations, short films and selected readings drawn from novels. The course will consist of written exercises, oral presentations, role plays, short essays and regular oral discussion based on the readings and material presented in class. Weekly exercises in preparation for the DELF proficiency exam constitute an important component of this class. The text used for this purpose is [Delf Scolaire & Junior B1](#).

AP French 12

The Grade 12 AP French course is designed to develop advanced proficiency in French through the study of Francophone culture, media, and literature, with a strong emphasis on oral and written communication. Students engage in sustained discussion and analysis, expressing personal responses and informed opinions both orally and in writing. The course begins with a comprehensive review of grammar and language structures and continues with targeted preparation for both the DELF B2

examination and the Advanced Placement French Language and Culture exam. Students explore a range of Francophone texts, films, and cultural topics, and are expected to complete independent reading and respond critically to what they have read and viewed. Learning is demonstrated through regular class discussions, essays, presentations, and creative projects, including major and minor presentations each semester. Authentic materials and information technology are used to support all aspects of language learning, including reading, writing, speaking, listening comprehension, and cultural understanding. Independent study and exam-focused practice form an integral part of the course to ensure students are well prepared for the DELF and AP examinations in the spring.

Languages: Spanish

At Sacred Heart, our approach to Spanish is based on the four language skills: listening, speaking, reading, and writing, as well as introducing an important cultural context. This cultural connection enables students to learn about Spanish speaking countries in the world, making them better global citizens and 21st-century learners. Advanced Spanish students may explore the possibility of sitting the DELE Exam based on what levels are being offered at our closest exam centre (typically Dalhousie University Spanish Department). For more current information please consult your Spanish teacher or Department Head.

Spanish 10

Spanish 10 is an introductory course that develops students' ability to communicate in Spanish while building awareness of Spanish-speaking cultures. Emphasis is placed on listening, speaking, reading, and writing through practical, real-world language use. Students learn to express personal interests, describe daily routines, discuss leisure activities, and navigate familiar situations such as ordering food and finding services in a community.

Instruction is supported by [Reporteros 1](#) (print and online workbook), the KLETT Hub digital platform, and a range of authentic Spanish-language resources, including readers, magazines, websites, podcasts, and videos. Learning is reinforced through interactive classroom activities, cultural projects, oral presentations, and regular formative assessments. The course follows the Common European Framework of Reference for Languages (CEFR) at the A1 level and provides a strong foundation for continued study of Spanish.

Spanish 11

Spanish 11 builds on the foundations established in Spanish 10 and supports students in developing greater confidence and independence in their use of the language. The course expands students'

vocabulary and structural knowledge while deepening their ability to communicate in real-world situations at an intermediate level. Instruction takes place primarily in Spanish, with English used only as needed for clarification, and places increased emphasis on oral interaction, reading comprehension, and written expression.

Students work with Reporteros 2 (print and online workbook) through the KLETT World Languages digital platform, along with Spanish-language readers such as Un gol fantástico and Mi año de intercambio, and a variety of authentic resources including magazines, websites, podcasts, videos, and films. Learning is reinforced through regular speaking activities, journal writing, cultural projects, presentations, and formative assessments. The course provides continued exposure to present, past, and future tenses and includes structured practice aligned with DELE and CEFR A1/A2 expectations, preparing students for further study of Spanish.

Spanish 12

During this course, emphasis will be placed on all linguistic aspects of a second language: reading, writing, listening, and speaking. Language learned in previous levels will be constantly reviewed and consolidated, and more advanced language structures will be added through themed units such as human relations, living, and employment. Selected topics in Spanish and Latin American culture and history will be explored. Students will use authentic video materials as a basis for vocabulary and grammar practice in the form of discussions and writing assignments. Students will read informative texts, literacy texts, mass communications texts (e.g., advertisements, brochures, newspapers) which are then used as a springboard for vocabulary building, use of verb tenses, discussions, and different written tasks.

Mathematics

For the sequence of Mathematics courses, please refer to the [diagram linked here](#).

The aim of this program is to make mathematics both engaging and intellectually rewarding, while providing students with the foundational skills necessary for success in future academic endeavors that require a strong mathematical understanding. The courses are carefully structured to align with the Nova Scotia Department of Education's Program of Studies, with additional content designed to deepen and enhance student learning. In the advanced stream, students will delve into more challenging topics to further prepare them for university-level mathematics, and they will have the opportunity to take the AP Pre-Calculus and AP Calculus exams.

Mathematics 10

In this course, we emphasize building a strong foundation in working with algebraic expressions and equations. Content includes solving multi-step algebraic equations, basics of functions, linear equations, systems of linear equations, exponential expressions, right angle trigonometry, expanding polynomials, factoring polynomials, and radical expressions. Problem solving is emphasized in all topics. Scientific calculators are used throughout the year. Group learning, verbalizing, writing, and sharing are important aspects of this class.

Mathematics 10 (Advanced)

This course focuses on the application of mathematical concepts and skills to science-related problems. Major topics include: linear functions, quadratic functions, systems of linear equations, operations with radicals, factoring polynomials, vectors, trigonometry, analytic geometry, and manipulating rational expressions. Graphing skills are developed throughout these units. The TI-84 Plus CE (or similar) graphing calculator is used as a tool in some of the topics throughout the year. Mathematics 9 (Advanced) is a prerequisite. Prerequisite of Mathematics 9 Advanced, or 90% or higher in Mathematics 9.

In Grade 11, students have some choice as to their Math pathway. Students should follow one of three options, which are grouped below with respect to their Math program.

The Grade 11 Program

- Mathematics 11 (1 credit)
- Mathematics 11 and Precalculus 11 (2 credits) offered consecutively, students must commit to completing the full year in these two courses after October 1st. Students will complete Math 11 by the end of January, and then complete Precalculus 11 by the end of the school year.
- Mathematics 11 Advanced and Precalculus 11 Advanced (2 credits) offered consecutively. Students may change levels, **but are committed to completing the 2 math courses after October 1st.**

Students will complete Math 11 Advanced by the end of January, and then complete Precalculus 11 Advanced by the end of the school year.

Mathematics 11

This course follows the Nova Scotia curriculum. Emphasis in this course is on consolidating and extending previously acquired concepts by emphasizing problem-solving and applications in the study of each topic. Topics include: trigonometry, statistics, linear programming, quadratic functions, proportional reasoning and logic. Scientific calculators are used throughout the year.

Mathematics 11 (Advanced)+Precalculus 11 (Advanced)

This is a 2 credit course, with students earning one Mathematics 11 Advanced credit and one Precalculus 11 Advanced credit. The primary focus of this course is the study of functions. Students will graph, analyze, and interpret a wide variety of functions and their transformations, with particular emphasis on polynomial, rational, exponential, logarithmic, and trigonometric functions. Clear and precise communication using appropriate mathematical language is strongly emphasized throughout the course. Students will continue to develop their skills in algebra, mathematical modeling, and applied geometric problem-solving. A TI-84 Plus CE (or a comparable graphing calculator) is required and will be used when appropriate to support learning and exploration. This course, along with AP Pre-Calculus 12, is designed primarily for students intending to pursue studies in science, engineering, or related fields at the post-secondary level. It serves as a prerequisite for AP Calculus 12. A final average of 80% in Mathematics 10 (Advanced) is recommended for enrollment in this course.

Mathematics 11+Pre-Calculus 11

This is a 2 credit course, with students earning one Mathematics 11 credit and one Precalculus 11 credit and covers the Nova Scotia curriculum. Topics include: linear programming, quadratic functions, systems of quadratic functions, quadratic inequalities in one and two variables, absolute value functions, analytic geometry, law of sines and cosines, unit circle values in degrees, statistics, arithmetic and geometric sequences and series, and rational expressions. Effective communication using appropriate mathematical language will be particularly emphasized. TI - 84 Plus CE (or similar) graphing calculators are used where applicable. A final average of 80% in Math 10 or 60% in Math 10 advanced is required to enroll in this course pair.

Mathematics 12

This course is designed to provide students with the mathematical understanding and critical thinking skills needed for post-secondary programs that do not require theoretical calculus. The focus of the first term is financial literacy and mathematics, where students learn the fundamentals of investment and

borrowing options. The term culminates using various technologies (spreadsheets and time value of money calculators) to make portfolio predictions. The focus of the second term shifts to mathematical logic (logical reasoning and set theory) and data analysis. Building on the technology skills developed in the first term, students learn how to graph data, add an appropriate trendline with a corresponding equation (polynomial, exponential/logarithmic, or sinusoidal), and make predictions using that equation.

Pre-Calculus 12

This is a continuation of Pre-Calculus 11 and follows the Nova Scotia curriculum. Throughout this course, algebra, and applied geometric problem-solving skills needed for university level mathematics are emphasized. Students will investigate the properties of polynomial, rational, exponential, logarithmic, trigonometric and radical functions and develop techniques for analyzing and graphing these functions. TI - 84 Plus CE (or similar) graphing calculators are used where applicable. Pre-Calculus 11 or Advanced Pre-Calculus 11 is a prerequisite.

AP Pre-Calculus 12 (Advanced)

The intent of this course is to amalgamate and build upon the algebra and geometry skills previously studied in Grades 10 and 11. Topics include sequences and series, systems of equations and matrices, circle geometry, parametric equations, complex numbers, polar equations, statistics, probability, and an introduction to proofs. TI-84 Plus CE (or similar) graphing calculators are used throughout the course.

Students should have achieved a minimum grade of 80% or higher in Precalculus 11 Advanced.

Students may choose to write the AP Pre-Calculus exam offered by the College Board in May.

Calculus 12

This high school-level course aligns with the Nova Scotia curriculum and is designed to equip students with the essential skills to apply calculus in a range of fields, including sciences, social sciences, and business. It also lays a solid foundation for advanced calculus studies. Topics covered include limits, basic derivatives, properties of derivatives, derivatives of special (trigonometric, exponential, and logarithmic) functions, and applications of derivatives such as extreme and mean value theorems, rates of change, optimization, and curve sketching. Antiderivatives, integrals, and the Fundamental Theorems of Calculus are explored in the second term. TI-84 CE (or similar) graphing calculators are used throughout the course. Prerequisites include Pre-Calculus 11 or Advanced Pre-Calculus 11, and Pre-Calculus 12 must be taken concurrently.

AP Calculus 12

In this course, students investigate the fundamentals of differential and integral calculus including limits, rates of change, derivatives of basic functions, definite and indefinite integrals. These skills are applied in the solution of a variety of types of problems including motion problems, optimization, related rate problems, differential equations, area and volume. Emphasis is placed both on understanding and communicating mathematical concepts and making connections between verbal, numerical, algebraic and graphical representations of problems and ideas. The TI-84 Plus CE (or similar) graphing calculator will be used throughout the course with an emphasis on further extending the students' graphing skills including the ability to numerically calculate derivatives and integrals. The graphing calculator and other appropriate computer software will also be employed to help illustrate and investigate ideas and to help interpret results and verify conclusions. This course aligns with the curriculum of the College Board's Advanced Placement (AP) Calculus AB program. Students enrolled will have the opportunity to write the AP Calculus Examination in May for possible university credit or placement.

Students must also be registered in Precalculus 12 Advanced/AP in order to take this course.

A final average of 80% is needed in Math 11 (Advanced) and Pre-Calculus 11 (Advanced) in order to enroll in this course.

Physical Education

Physical Education 10

This full credit course is required for completion of a high school diploma. The aim of this course is to promote personal fitness/testing, student leadership, nutrition, and lifelong athletic pursuits. Students will also have the opportunity to be involved with game-oriented play in both individual and team sport.

Fitness Leadership (PE) 11/12

Students will be encouraged to engage in a variety of fitness experiences, broaden their understanding of human anatomy and exercise physiology, examine the benefits of active, healthy living, and apply the principles of conditioning to design and deliver safe fitness experiences. This course comprises five modules: Anatomy and Physiology, Principles of Conditioning, Active Healthy Living, Injury Prevention and Risk Management, and Components of Fitness.

Religious Studies

The goal of the Religious Studies Program is to help students understand that they have a spiritual side of their being. Acknowledging our historical roots as a Catholic school, as well as the religious diversity within our current faculty and student body, the program is meant to awaken the spiritual life, either within or without a specific religious framework. Through the years of study, students will develop their mindfulness and meditative practices, and will see the fundamental beliefs and practices of many world religions. As a Catholic School, we attend key liturgies at Saint Mary's Cathedral Basilica, and attendance from the school community is expected.

Grade 10

Students investigate four main topics during this course: 1) creation stories, 2) destruction stories, 3) religious wars and conflicts, and 4) the role of religion in stabilizing and destabilizing empires. The purpose of this course is to help students understand A) the similar themes that exist cross-culturally in creation and destruction stories, B) why people use religious motivations for conflict, and C) how religion contributes to the organization and cohesiveness of a society. In addition to these religious topics, a significant amount of time is devoted to mindfulness and meditative activities.

Grade 11

The course is designed as a survey of world religions. It is organized thematically and regionally to give students a clear comparative framework while allowing deep engagement with primary texts, rituals, art, and lived practice. As we encounter religions with varying beliefs and practices, a respectful and open minded approach is essential. This course will foster a sense of interfaith harmony and understanding. We will focus on research and presentation skills, active listening, and extracting multiple levels of truth from text. Key interpretative lenses will be the literal and metaphorical, the concrete and abstract, and the mythological and archetypal.

Grade 12

Social Justice in Action: this course encourages students to develop a personal relationship with God by serving others. Students will learn about social justice as one of the pillars of Christian spirituality as well as a responsibility to the world we live in. Concentrating on raising the students' awareness of how to live out their understanding of social justice in everyday life, this course provides the opportunity for the students to take an active and regular part in volunteer service in the wider Halifax community. At Sacred Heart, the gospel challenge to "act justly, love tenderly and walk humbly with our God" is an important part of our curriculum. Students learn that their efforts make a difference, and that helping others is hard work and demands commitment.

Science

Science Prerequisites

Grade 12	Grade 11	Grade 10	Grade 9
AP Chemistry 12	Chemistry 11 (Advanced) Chemistry 11 (90%+) Math 11 (Advanced) /Pre-Calculus 11 (Advanced)	Science 10 (Advanced) (80% +) Science 10 (90%+) Math 10 (Advanced) or enrolled in Math 11 (Advanced)	Science 9 (85%+) Math 9 (Advanced)
Biology 12	Biology 11 or Chemistry 11		
AP Physics 12	Physics 11 (Advanced) Math 11 (Advanced) /Pre-Calculus 11 (Advanced)	Science 10 (Advanced) (80% +) Science 10 (90%+) Math 10 (Advanced)	Science 9 (85%+) Math 9 (Advanced)

The goals of the junior and senior high programmes have been organized around four clusters:

Scientific attitudes - for the students to develop positive attitudes towards science, respect for the environment, and a commitment to the wise use of resources; an understanding of the nature of science as a human endeavour, and an appreciation of scientific knowledge and processes in a technological society.

Skills and processes - for the students to develop an understanding of and the ability to use the scientific process skills of observing, classifying, measuring, using numbers, communicating, inferring, predicting, identifying and controlling variables, and interpreting data; skills which include questioning, working in groups, and sharing and establishing effective study processes.

Thinking ability - for the students to develop a facility in problem-solving through science using creative, rational and critical thinking approaches, and inquisitive-thinking strategies using questioning skills.

Scientific knowledge - for the students to develop the basic knowledge required to understand the concepts needed in a scientific and technological world and to develop an awareness of the career possibilities in the fields of science and technology.

Science 10

This course ensures that students understand essential concepts in physics, chemistry and life sciences. Through it they develop an understanding of the processes of scientific inquiry and learn to relate the pursuit of scientific knowledge to today's society, environment and technology.

Students will pursue inquiries related to chemical reactions, the laws of motion, weather systems and climate change, and ecological sustainability. This programme provides the foundation for successive science courses in the senior high.

Science 10 (Advanced)

This advanced course emphasizes critical thinking, creative problem solving and the ability to apply scientific concepts, all within the context of modern society and technology. Students will pursue inquiries related to atomic theory, molecular structures and properties, and chemical bonding. They will also explore evolution, genetics and ecosystems and investigate motion and Newton's laws. This programme provides a solid foundation for successive advanced science courses in the Senior High. Students considering a career in science or mathematics are encouraged to take this course.

Prerequisites: A mark of 85% in grade 9 science. Students taking this course must also take Math 10 (Advanced).

Biology 11

Grade 11 Biology is the first year of a two-year course that will give the student a strong foundation for university courses in biology. We start the year by studying ecology. This includes behavioural, population, and community ecology as well as a study of biomes and conservation biology. We continue the year with the study of cells. The various structures and functions of the organelles within the cells are explored as well as those of the macromolecules used by the organelles. We end the year with a study of mitosis and meiosis, biodiversity and a deeper dive into cellular respiration and photosynthesis.

Biology 12

Grade 12 Biology is a continuation of the two-year course started in Grade 11. Our main focus this year is the study of animal systems and functions. We begin the year by looking at molecular genetics, biotechnology, viruses, and bacteria. We then embark on the study of digestion, circulation, the immune system, and excretion, hormones and the endocrine system, the nervous systems, and sensory and motor mechanisms.

Prerequisites: Biology 11, Chemistry 11 or Chemistry 11 (Advanced).

AP Biology 12

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, cellular processes, energy and communication, genetic information transfer, ecology, and interactions.

Prerequisites: Biology 11, or permission from VP Academics or teacher.

Chemistry 11

This course is suited for the students who need a science requirement credit for university entrance as well as for those who intend to go into further study of Chemistry. This is an academic study of the important principles of Chemistry and the facts on which they are based. It includes theoretical study along with laboratory activities and problem solving, formulating hypotheses necessary for interpreting chemical data by means of data tables and graphs, identification and observation of chemical reactions in the laboratory and writing experimental reports of the work done. Science technology and society issues are also part of the programme. Topics include: Scientific Measurements, Structure and Properties of Elements, Formula Writing, The Periodic Table, Chemical Bonding, Chemical Quantities and Reactions, and Behaviour of Gases. Projects and term papers are linked to the various topics.

Chemistry 11 (Advanced)

This is an advanced course and is based on an investigative approach to studying chemistry. It emphasizes chemical principles rather than descriptive chemistry and the relationship between experiment and theory. This programme is an excellent introduction to chemistry for those students who have an above-average interest and ability in science. Topics include: atomic theory, chemical bonding, compound nomenclature, solutions, chemical reactions and stoichiometry, and the gas laws.

Prerequisites: A mark of 80% or above in Math 10 (Advanced) and Science 10 (Advanced), or a mark of 90% or above in Science 10. Students taking this course must be enrolled in Math 11 (Advanced).

Chemistry 12

The programme is for Grade 12 students, especially those who need to complete the credits started with Chemistry 11 (Academic) and who need to fulfill the Science credit requirement for university entrance. The programme includes a review of Chemistry 11 and concentrates on new topics such as: solutions and stoichiometry, acids and bases, water and aqueous systems with a case study, and Organic Chemistry. Calculations of numerical problems, application of principles relevant to each topic, and writing formal laboratory experiments are goals to be met for this course. Science-Technology-Society issues such as Atmosphere and Water Pollution are also included in this course.

Prerequisites: Chemistry 11 or Chemistry 11 (Advanced).

Chemistry 12 (AP)

This course is designed to build on the work done in Chemistry 11 (Advanced) and to enable students to enter a university chemistry course with a solid knowledge of both theoretical and experimental aspects of Chemistry. Topics include: organic chemistry, thermodynamics and thermochemistry, chemical kinetics, chemical equilibrium, acid-base equilibria, electrochemistry and nuclear chemistry. Writing the AP Chemistry exam is an option for those students who are interested.

Prerequisites: Chemistry 11 (Advanced) and Math 11 (Advanced) and Pre-Calculus 11 (Advanced).

Oceans 11

This course offers an in-depth exploration of the structure, biomes, and applications of oceanic and marine life. Given our proximity to the ocean, students will cultivate a profound appreciation and a comprehensive understanding of the marine environment, including the ocean floor, currents, tides, and the marine biome, along with its diverse organisms and habitats. The course will also address coastal regions and examine human impacts, such as aquaculture and fisheries. A field trip designed to study the coastal environment will be an essential component of the curriculum.

Physics 11

An introductory course in physics for students with an interest in science and proven ability in mathematics, with an emphasis on conceptual understanding. Topics include kinematics (up to two dimensions), Newton's Laws of Motions and dynamics (up to two dimensions), energy and momentum, and waves and sound.

Physics 11 (Advanced)

An introductory course in physics for students with a particular interest in science and proven ability in mathematics. The topics include: 1D and 2D kinematics, vectors, 1D and 2D dynamics, Newton's Laws of Motion, momentum, waves, simple harmonic motion, work, power, and energy.

Prerequisites: A mark of 80% or above in Math 10 (Advanced) and Science 10 (Advanced), or a mark of 90% or above in Science 10. Students taking this course must also be enrolled in Math 11 (Advanced) and Pre-Calculus 11 (Advanced).

Physics 12

This course is a continuation of Physics 11. The topics include: circular and gravitational motion, collisions, projectile motion, static equilibrium, electricity, magnetism and modern physics and radioactivity.

Prerequisites: Physics 11 or Physics 11 (Advanced).

Physics 12 (AP)

This course is a continuation of Physics 11 (Advanced). The topics include: circular and gravitational motion, rotational motion and static equilibrium, electrostatics, circuits, magnetism, electromagnetic

spectrum and light, fluids and modern physics. Writing the AP Physics exam is an option for those students who are interested.

Prerequisites: Physics 11 (Advanced) and Math 11 (Advanced) and Pre-Calculus 11 (Advanced).

Social Studies

History 10

This course uses a chronological approach towards the study of Canadian and American history, beginning with the early treaty relationships, the path to Confederation and Canada in the 20th century. An introduction to Civics is included throughout the course. Internet sources, literature, and film documentaries are used along with textbook materials. Project work includes visual representations, oral presentations, formal essays, and exams. Students are expected to stay abreast of current events as many connections are made to link the past and the present through discussion.

History 11

This course is a general survey of the development of European nations and important ideas from the sixteenth century to the beginning of the twentieth century. Special emphasis will focus on the Renaissance, the French Revolution, Napoleon, The Industrial Revolution, and Nation-building at the end of the nineteenth century. The aim of this course is to help students better understand our complex modern world and many of its current challenges.

European History 11 (Advanced)

This course is a general survey of the development of European nations and important ideas from the sixteenth century to the dawn of the twentieth century. Special emphasis will be focused on the Renaissance, the Reformation, the Enlightenment, the French Revolution, the Industrial Revolution and the rise of nationalism. The aim of this course is to help students better understand our complex modern world and its many intricacies, as well as to introduce students to formal essay writing and primary source analysis. Current events will be examined by drawing connections to the topics covered in class. Prerequisite: A mark of 80% or higher in History 10.

History 12

The World in the Twentieth Century. This course gives a broad overview of twentieth-century history. Major political, economic, and social trends of this century are examined and discussed. The approach is interpretative, aiming at helping students understand how their world has been shaped. Students are encouraged to become critical thinkers and are required to write analytical term papers.

AP European History 12 (Advanced)

This course will explore the history of the world from the late-nineteenth century to the present, with a special emphasis placed on Europe and the West. Topics to be covered include imperial rivalries and the alliance system, the Great War and the interwar period, World War II, the Cold War, and the New Europe. The aim of this course is to provide students with a solid understanding of the interconnectedness of

social, political, and cultural events throughout this time period, as well as an appreciation for the importance of memory and narrative in the transmission of history. Students are encouraged to become critical thinkers and are required to write analytical term papers. Writing the AP European History Exam is an option for those students who are interested. Prerequisite: History 11 ADV.

Economics 11

This course explores the choices that individuals and societies make about the use of resources in a competitive global economy. Students will use economic concepts and models, as well as methods of economic inquiry, to analyze current economic issues and make informed economic choices based on their analysis. Study will take place at the microeconomic and macroeconomic level, as well as the personal finance level.

Sociology 12

This course is a comprehensive introduction to the study of Sociology. Students examine the organization and interaction of humans in societies, as well as the theories found in historical and current social thinking. Students study components common to every society, such as culture, education, and socialization, and investigate the forces responsible for social trends, group behaviour, and development of self. Using discussion, research, and personal reflection, students also examine the structures and principles lying hidden beneath their own position in society.

Global Politics 12

This course explores a variety of relevant political issues through a critical inquiry process. Global Politics 12 is organized into five units: Introduction to Politics and Political Ideologies, Political Systems, Comparative Politics, International Relations; and The Independent Study Unit. These units cover such topics as forms of government, governmental processes, political organizations, international political trends, political theories (e.g. liberalism, conservatism, Marxism). Students will be expected to make connections to current events.

Technology

The Senior Technology Program is designed to deepen students' technological literacy by exploring technology in a global context, focusing on key areas such as control technology and media design. Students will engage with hands-on projects that apply problem-solving and troubleshooting skills in real-world contexts, developing competencies in coding, programming, and system management. The program also covers the history, evolution, and future trends of technology, alongside its social, cultural, and ethical implications.

Students will continue to build proficiency in areas from our Junior High curriculum, while also enhancing their research and communication skills. Key concepts in digital citizenship, technological responsibility, and ethical consideration will be explored throughout the program. Students will also gain exposure to emerging technologies.

The curriculum emphasizes collaboration, teamwork, leadership, and adaptability, equipping students with both technical and soft skills essential for careers in the rapidly evolving tech industry. By the end of the program, students will be prepared to design, develop, and evaluate technological solutions, while gaining a deeper understanding of how technology shapes society and the workforce. They will also be ready for further study in technology fields, with the ability to adapt to new advancements and integrate emerging technologies into real-world applications.

Technology 10

The aim of this course is to explore technology in a global context, focusing on four thematic units: Introduction to Technology (including career exploration, and the history and future of technology); Control Technology (focusing on coding, programming, and system management); Media Design Technology (covering design principles and communication tools); and Engineering Technology (emphasizing technical design and practical applications). Students will build technological literacy through hands-on activities that apply problem-solving and troubleshooting skills in real-world contexts. They will develop competencies in coding, programming, digital citizenship, and technological responsibility, while exploring emerging technologies such as AI, machine learning, blockchain, and VR/AR. The course emphasizes collaboration, teamwork, leadership, adaptability, and communication skills. Students will also gain real-world experience through projects (e.g., app development, game design, design work), equipping them with the skills needed for careers in the tech industry and preparing them to adapt to rapidly evolving technologies.

University Prep Program

The goal of the university prep program is to find the best possible place for each student to land and to prepare them for a successful transition.

The program has two parts, which together provide comprehensive support. Grades 10 (1/month), 11 (2/month), and 12 (weekly) have University Prep classes. Students start by looking at strengths, interests, and life philosophies. They start building resumes as living documents that will be ready when needed. Course selection guidance is provided for 9's, 10's and 11's.

Grade 11 is the crucial research and exploration year. We host University Fairs along with numerous recruiter visits. Rather than try to narrow interests, students are first encouraged to keep an open mind and explore lots of possibilities. Students learn criteria and how to compare & contrast their options. This culminates in an initial 'safe to stretch' list.

Our grade 12's are encouraged to apply in the Fall for the Early Application window. This is followed by support for supplementary applications, interviews and scholarship applications. There are presentations on transitional topics like Finances at University, Healthy Relationships, University course selection, Life on Campus, Campus Supports, etc.

The second part of University Prep is the capacity for individual appointments. These meetings are mostly compiled of grade 12's in Semester 1 and a combo of 12's and 11's in Semester 2. There is even a sprinkling of keen 10's throughout the year. These meetings evolve into personalized support vs a one size fits all approach.

This is a required course.