

# Senior High (Grades 10-12)

# Academic Guide 2025-2026

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



WELCOME	
Requirements for a Sacred Heart Graduation Diploma	
COURSE DESCRIPTIONS	
English	6
English 10	
AP Seminar (counts as English 10 credit)	
English 11	
AP English 11	
English 12	
AP English 12	
English As An Additional Language	9
EAL 10-11	9
EAL 12	9
Fine and Performing Arts	
Performing Arts 10 (Drama)	
Grade 10 Music	
Grade 10 - Fine and Visual Art	10
Drama 11	10
Band (10, 11 and 12)	
Languages: French	13
French 10	13
French 10 (Advanced)	13
French 11	13
French 11 (Advanced)	14
French 12	14
AP French 12	
Languages: Spanish	
Spanish 10	
Spanish 11	
Spanish 12	
Mathematics	
Mathematics 10	
Mathematics 10 (Advanced)	
The Grade 11 Program	
Mathematics 11	18
Mathematics 11 (Advanced)	
Pre-Calculus 11	18
Pre-Calculus 11 (Advanced):	18
Mathematics 12	18



Pre-Calculus 12	
AP Pre-Calculus 12 (Advanced)	19
Calculus 12	
AP Calculus 12	
Physical Education	21
Physical Education 10	21
Fitness Leadership (PE) 11/12	21
Religious Studies	
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
Chemistry 11	24
Chemistry 11 (Advanced)	25
Chemistry 12	
Chemistry 12 (AP)	25
Oceans 11	25
Physics 11	26
Physics 11 (Advanced)	26
Physics 12	26
Physics 12 (AP)	26
Social Studies	27
History 10	27
Mi'kmaw Studies 11	27
History 11	27
History 11 (Advanced)	27
History 12	27
AP European History 12 (Advanced)	
Economics 11	28
Sociology 12	
Global Politics 12	28
Technology	29
Technology 10	29
Computer Design and Technology 11	30



Dear Parents and Students,

Welcome to Sacred Heart School of Halifax, one of the top independent schools in the region. Here, we offer an unparalleled education — one that is tailored to our students by gender, aptitude, interest, and dream. We also offer an experience no other school can match. As part of a Network of Sacred Heart schools around the world, we offer meaningful traditions and global opportunities. We also believe in faith, hope, and love as guiding principles in the spiritual development of students. That solid moral grounding, informed by our Five Goals, means we inspire our students to be the best for the world, not just the best in the world.

Sacred Heart School of Halifax meets and exceeds all provincial Department of Education requirements and standards. And because we know that education is inherently relational, we invest in small classes with dedicated teachers and emotionally positive and academically motivated peer groups. In our co-ed Grades 10-12, through academic and Advanced Placement (AP) programs, our students strengthen critical thinking skills, build self-confidence, and prepare for university. We also have a highly experienced University Prep Counsellor to help guide our students to the university of their choice. To round out the academic experience, we offer a robust co-curricular program that includes educational travel, athletics, artistic development, student leadership, robotics, technology, debating, social action, and experiential learning all designed to prepare each student for their journey through life.

We are accredited by the Canadian Accredited Independent Schools (CAIS), one of only three Halifax schools to earn this distinction. It's your guarantee of excellence — it means we offer the best in education, leadership, management, and governance.

Our Academic Guides open our program to you. Step through and explore why we are at the HEART of something special.

Kind regards,

Dennis Phillips, Head of School Dr. Wallace MacAskill, Principal-Grades 7-12



# 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.



# **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

SHSH Academic Guide 2025-26





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.

# 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 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.

# 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 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 English as an Additional Language (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 are routinely 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 course equips students with essential interpersonal communication skills for today's world. It aims to foster creativity, confidence, and effective listening and speaking. Through a diverse performing arts curriculum, students engage in devising, performing, and responding to a variety of stimuli. Topics include storytelling, character development, role scoring, memorization, scriptwriting and theatre history. Students refine their skills in monologues, voice projection, body language, non-verbal communication, diction, scene work, improvisation, and overall expressiveness. The course culminates in the production of finished scenes. Performing Arts 10 (Drama) fulfills the Arts credit for high school graduation.

#### **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 SHSH Academic Guide 2025-26



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 SHSH Academic Guide 2025-26



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 Nova Scotia curriculum. Registered Grade 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

Grade 10 French provides a program for students who followed our Junior High French courses. Students are expected to have a good understanding of A1 and A2 French vocabulary, and be comfortable using the present, past, and future tenses. This course is taught in the target language and students are expected to communicate in French during the course. This course is constructed around themes that allow students to learn grammar, structure and vocabulary and be able to apply them in authentic situations. These include building skills with reading, writing, speaking and listening. Francophone culture is also explored through different lenses throughout the year. Preparation continues at this level for the DELF 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 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 will explore relevant themes and engage with a diverse range of readings that come from a variety of authentic French sources. Students will continue to develop their familiarity with aspects of Francophone culture. 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, etc.), and are expected to give short oral presentations and complete a variety of written assignments. Students read and discuss a variety of texts with the objective of deepening their French SHSH Academic Guide 2025-26



vocabulary and their appreciation of Francophone culture around the world. 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)

Grammar studied includes all common tense forms and basic grammatical structures. The subjonctif, as well as several new tenses including the plus-que-parfait, the conditionnel passé, the futur antérieur and the passé littéraire will be studied. Each student is encouraged to broaden their cultural knowledge by listening to French podcasts, shows and/or radio on their own. Literature as well as poetry and songs will be studied together in the classroom setting. The class also has the opportunity to write and perform short plays that will be presented to fellow french students. Students will be responsible to do formal oral presentations, written responses, individual readings and to participate in class discussions. Preparation continues at this level for the DELF 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 12

This Grade 12 course is designed to deepen students' understanding of concepts covered in previous years and to prepare students for success in the Delf exams. There will be a general revision of grammar and vocabulary. Several tenses including the plus-que-parfait, the futur antérieur, the passé littéraire, the subjonctif and the conditionnel passé will be studied and reinforced. The class also has the opportunity to learn practical, new vocabulary through oral presentations, short films and selected readings drawn from novels such as Jeanne D'Arc, Carmen by Prosper Mérimée, and Le Fantôme de L'Opéra. 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. Both Grade 12 Advanced and Academic streams are well prepared for the DELF French Language Proficiency Exam and have the opportunity to write the exam in April at their preferred level of difficulty, usually the intermediate level B1 or advanced level B2.

#### AP French 12

A general revision of grammar is undertaken and discussions, oral presentations and essays continue to form an important part of the course. Students will study a selection of works by well-known writers from the Middle Ages to the 21st century, including two complete novels and a play, such as: L'Etranger, Persepolis, Ru and Candide, and plays by Molière. Each student is required to read one novel or graphic novel on their own. The class also has the opportunity to see several classic French films. Students are responsible for several formal presentations on topics that impact Francophone culture. Students in this course also prepare for the DELF B2 Exam as well as the Advanced Placement French Language and Culture exam through weekly exercises in reading, writing, vocabulary building, and oral proficiency while studying the format of the exams.

# 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 for 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

The goals of this course are to provide the students with an introduction to Spanish language and culture. A study of basic phrases and pronunciation will be followed by an introduction to verb groups in the present tense. Emphasis will be put on the acquisition of new phrases and vocabulary, followed by an introduction to the past and future tenses. The language of instruction in the classroom is primarily English in the first term, until the students advance in the second term enabling the class discussion to take place in Spanish. Students will complete three projects based on Latin American and Spanish cultural topics over the school year. The grammar text is Reporteros 1 (e-text + online workbook) on Klett World Languages (online Spanish language content platform) Easy Spanish Reader, Spanish language magazines, websites, podcasts and videos.

#### Spanish 11

The goals of this course are to continue building on the introductory information taught in Spanish 10. A detailed review of structures from Spanish 10 will be followed by the study of new vocabulary, verb forms and tenses. A greater emphasis will be placed on the speaking of Spanish within the classroom setting through creative dialogue, role playing and other activities. An increased concentration will also be placed on the students' reading and writing skills in Spanish. Selected topics on Spanish and Latin American cultures will be explored through projects, presentations and readings during the year. The grammar text and readers are Reporteros 2 (e-text + online workbook) on Klett World Languages (online Spanish language content platform) Un gól fantastico, Easy Spanish Reader, Spanish language magazines, websites, podcasts, and videos.

#### 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. 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**

This course follows the Nova Scotia curriculum. 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, 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.

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.

(D)



Students will complete Math 11 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)

The major focus of this course is the study of functions. Topics include: graphing and analyzing a variety of functions and their transformations with a particular focus on polynomial and rational functions. Effective communication using appropriate mathematical language is particularly emphasized. Throughout the course, mathematical modeling techniques, algebra, and applied geometric problem-solving skills continue to be developed. TI - 84 Plus CE (or similar) graphing calculators are used where applicable. A final average of 70% in Mathematics 10 (Advanced) is recommended to enroll in this course.

#### **Pre-Calculus 11**

This course follows the Nova Scotia curriculum. Topics include: radical and rational expressions and equations, linear and quadratic functions and their reciprocals, absolute value equations, inequalities in two variables, and trigonometry. 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. Students must also be registered for Mathematics 11.

# Pre-Calculus 11 (Advanced):

This course and AP Pre-Calculus 12 are primarily intended for students who will choose to study the sciences, engineering, or a related field at a post-secondary institution. This course is a prerequisite for AP Calculus. Topics include: exponential, logarithmic, and trigonometric functions and their related applications. TI-84 Plus CE (or similar) graphing calculators are used where applicable. Mathematics 11 (Advanced) is a prerequisite.

#### **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 SHSH Academic Guide 2025-26



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

#### Calculus 12

This high school-level calculus 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, and derivatives of trigonometric, exponential, and logarithmic functions. Additionally, students will explore applications of derivatives in areas such as tangents, rates of change, motion, and curve sketching, as well as differential equations and applications of antiderivatives. TI-84 Plus CE (or similar) graphing calculators are used throughout the course. Prerequisites include Pre-Calculus 11 or Advanced Pre-Calculus 11 and student must also be taking Pre-Calculus 12.

#### AP Calculus 12

In this course, students investigate the fundamentals of differential and integral calculus including limits, rates of change, derivatives of basic functions, and 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. 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**

In term one, students will explore and research Biblical stories from the Old and New Testament as told through the stained glass windows at Saint Mary's Cathedral Basilica. In doing so, they will learn about the significance of this art form in communicating meaning through symbolism and colour, while also making connections to the historical context and their own personal experience. In term two, students will explore and articulate the differences between cults, mythology, and religion. To close the year, students will explore the positive and negative aspects of the evangelical process. In addition to these religious topics, a significant amount of time is devoted to mindfulness and meditative activities.

#### Grade 12

Social Justice in Action: this course encourages students to develop a personal relationship to 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, as they put into action the Christian principles they learn in the classroom.

SHSH Academic Guide 2025-26



# Science

# **Science Prerequisites**

Grade 12	Grade 11	Grade 10	Grade 9
AP Chemistry 12	Chemistry 11 (Advanced)	Science 10 (Advanced) (80% +)	Science 9 (85%+)
	Chemistry 11 (90%+)  Math 11 (Advanced) /Pre-Calculus 11 (Advanced)	Science 10 (90%+)  Math 10 (Advanced) or enrolled in Math 11	Math 9 (Advanced)
		(Advanced)	
Biology 12	Biology 11 or Chemistry 11		
AP Physics 12	Physics 11 (Advanced)	Science 10 (Advanced) (80% +)	Science 9 (85%+)
	Math 11 (Advanced) /Pre-Calculus 11 (Advanced)	Science 10 (90%+)	Math 9 (Advanced)
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The goals of the Junior and Senior High programs have been organized around four clusters:

<u>Scientific attitudes</u> - 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.



<u>Scientific knowledge</u> - 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 atomic and molecular structures and properties of elements, compounds, and mixtures. Other units of study include genetics and evolution, Newton's laws and weather systems and sustainability. This programme provides the foundation for successive science courses in the senior high.

### Science 10 (Advanced)

This honours 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 program 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.

<u>Prerequisites:</u> 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).



# **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 program. 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 honours 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 program 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.

<u>Prerequisites</u>: 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**

This program 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 program 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.

<u>Prerequisites</u>: 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

The Oceans 11 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. Additionally, the course will 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: 1D kinematics, Newton's Laws of Motions, 1D/2D dynamics, energy, and momentum, as well as 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.

<u>Prerequisites</u>: 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. <a href="Perequisites">Prerequisites</a>: 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 to 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.

#### Mi'kmaw Studies 11

This course explores Mi'kmaw issues past, present, and future. Students will consider broad concepts such as governance, culture, education, spirituality, and social justice. Students will analyze historical and Mi'kmaw issues, which will enable them to achieve a greater understanding of, and respect for, both Mi'kmaw society and Mi'kmaw contributions to Canadian society.

### **History 11**

This course is a general survey of the development of European nations and important ideas from the 16th century to the beginning of the 20th century. Special emphasis will focus on the Renaissance, the French Revolution, Napoleon, The Industrial Revolution, and nation-building at the end of the 19th century. The aim of this course is to help students better understand our complex modern world and many of its current challenges.

# **History 11 (Advanced)**

This course is a general survey of the development of European nations and important ideas from the 16th century to the dawn of the 20th 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 20th Century. This course gives a broad overview of 20th-century history. Major political, economic, and social trends of this century are examined and discussed. The approach is interpretative, aiming to help students understand how their world has been shaped. Students are encouraged to become critical thinkers and are required to write analytical term papers.

SHSH Academic Guide 2025-26





# **AP European History 12 (Advanced)**

This course will explore the history of the world from the late 19th 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 (Advanced).

#### **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. Students will also learn entrepreneurship skills through the operation of a small business.

# **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 Independent Study. These units cover such topics as forms of government, governmental processes, political organizations, international political trends, and 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.



# **Computer Design and Technology 11**

The course is an introduction to coding in Python. In Term 1, students learn basics, including 1) built-in functions, 2) storing and using information, 3) creating functions, and 4) Booleans. In Term 2, students learn the fundamentals of 5) branching, 6) iterating using for and while, 7) information stored sequences, 8) bundling information into objects, 9) structuring data, and 10) recursion. The course operates as a flipped classroom, and students spend almost all of class time coding. In addition to coding, there is a "technology is society" discussion in which students bring in articles to talk about how the rapidly changing technological landscape affects different aspects of our lives.