








Barat Academy

Grade 10-12

Academic Guide 2024-2025

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 co-ed education for JP-Grade 6 and single-gender education for Grades 7-12. 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

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 Grades 10-12, through both 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



Table of Contents:

Our High School Program of Studies	3
Senior High School.....	3
Requirements for a Sacred Heart Graduation Diploma	5
Extending our Program of Studies	5
Advanced Placement (AP).....	5
Experiential Learning.....	6
Online Learning.....	6
The ‘SHELL’ Program.....	6
Course Descriptions	8
Arts - Fine and Performing.....	8
SENIOR HIGH.....	8
Band.....	8
English.....	10
English As An Additional Language.....	12
Senior High.....	12
French	13
SENIOR HIGH.....	13
Mathematics.....	15
SENIOR HIGH.....	15
Music.....	17
Physical Education.....	17
SENIOR HIGH.....	17
Religious Studies.....	18
SENIOR HIGH.....	18
Science.....	19
Social Studies	22
SENIOR HIGH.....	22
Spanish.....	24
Technology.....	25
University Preparatory (Grades 10, 11 and 12).....	25
One Schoolhouse Online Courses	26



Our High School Program of Studies

Senior High School

II Academic (Grade 10)	III Academic (Grade 11)
Religious Studies 10	Religious Studies 11
English 10	English 11/English 11 (Adv)
Fine Arts 10 (Visual/Performing/Music)	History 11/History 11 (AP)
French 10 French 10 Advanced	Mathematics 11 Mathematics 11 Advanced
History 10	
Mathematics 10 (Adv.)/10	<u>Electives (3+ electives required):</u> Biology 11 Chemistry 11/Chemistry 11 (Adv.) Computer Design 11 Economics 11 PreCalculus 11/PreCalculus 11 (Adv.) Physics 11/Physics 11 (Adv.) French 11 (Adv.) Spanish 11 Physical Education (PE) 11 Band 11 Experiential Learning One Schoolhouse Online courses EAL 11
Science 10 (Adv.)/10	
Spanish 10	
Technology 10	
Physical Education 10 Band 10 EAL 10	



IV Academic (Grade 12)
Religious Studies 12
University Preparation Course
AP English Lit / English 12
History 12/AP European History 12
Pre-Calculus 12 Pre-Calculus 12 Adv Math 12
Electives (3 electives required) *: Biology 12 Chemistry 12/Chemistry 12 (AP.) Physics 12/Physics 12 (Adv.) French 12 (Adv.)* Spanish 12* Sociology 12* Calculus 12 (AP.) Physical Education (PE) 12 Band 12 EAL 12 (non-credit support only) Experiential Learning One Schoolhouse Online Courses

For promotion to the next grade/graduation, an overall average of 60% with no mark below 50% is required in all academic subjects.

To receive a Sacred Heart High School diploma, a student must complete at least 6 credits at the Grade 12 level.



Requirements for a Sacred Heart Graduation Diploma

Compulsory Credits:

- 3 English
- 3 Math
- 3 History (one Global, one Canadian)
- 3 Science
- 1 Arts Course (Music, Visual Arts or Performing Arts)
- 3 Religious Studies
- 2 Languages
- 1 Physical Education

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

Extending our Program of Studies

Sacred Heart School of Halifax, Fountain Academy meets and exceeds all provincial high school academic standards. We also embed opportunities for students to extend and enrich their studies as part of our advanced program of study.

Advanced Placement (AP)

Like many top quality independent schools, Sacred Heart School of Halifax has developed a rigorous Advanced Placement (AP) Program for university-bound students. The AP experience is designed to help high school students make a successful transition to higher education.

The College Board, which has run the AP Program since 1955, has developed a wide range of college-level courses that complement and extend the boundaries of regular high school curricula in the arts, sciences, mathematics, and languages. The AP Program offers college-level courses to highly-motivated high school students across Canada, the United States, and abroad. Each participating school selects the course offerings that are best suited to its particular student population and teaching resources. AP courses are challenging and stimulating and require a greater commitment of time and effort from students. In return, the AP courses offer greater opportunity for intellectual challenge, individual progress, and accomplishment. Students who do well on the examinations may earn a university credit or an advanced standing at numerous universities and colleges across Canada and the United States.

Sacred Heart School of Halifax is registered with the College Board as an AP school. The AP Program gives students an opportunity to take college-level courses and exams while they are still in high school. They may earn credit, advanced placement, or both for university. There are many benefits for students: the program is challenging, it permits students to move more quickly into advanced classes in university, it can improve self-esteem, and it can increase a student's options at university. Students



in grades 11 and 12 are selected to participate in AP courses on the basis of their preparation for such a course, their willingness and ability to meet its academic challenges, and the level of support they have from family.

The Advanced Placement International Diploma (APID) is a globally recognized certificate for students with an international outlook. The APID challenges a student to display exceptional achievement on AP Exams across several disciplines. To earn an APID, students must earn grades of three or higher on at least five AP Exams in specific content areas. Universities worldwide utilize the APID in admissions. Students may search the College Board website at <http://www.collegeboard.com/> for more information and for a list of the large number of Canadian and international universities that acknowledge AP achievement.

Experiential Learning

The goal of the Experiential Learning Program is to give students academic credit for learning which takes place beyond the classroom in a real-world environment. The internship can be in the areas of Business, Academic Research, Technology and Design, or Fine and Performing Arts, and must take place for the length of the school year in which the credit is granted.

Students are eligible to claim one credit in either grade 11 or 12. ***Pre-approval must be sought from the Principal.*** Students engage in a minimum of 110 hours of experiential learning at their internship placement and reflect upon their experience. Students are responsible to identify a mentor to act as their guide throughout the internship and a teacher from within the school to act as a liaison and final evaluator. Please see the Experiential Learning Application Booklet for more information.

Online Learning

Sacred Heart, along with a number of other leading CAIS and Sacred Heart schools, is pleased to offer the option to take some online credit courses through One Schoolhouse. In order for registration to happen, students must speak with Mr. Pinches, Vice-Principal, Academics, to discuss the potential course, whether it meets the requirement for a full credit, and how it fits into their program. These courses will generally be taken as an elective course. For more information, please see the registration instructions at the end of this guide.

The 'SHELL' Program

S.H.E.L.L or Sacred Heart Experiential Learner for Life is an elective certificate and diploma program for Senior Barat and Fountain students. The goal of SHELL is to create opportunities for students to develop a more expansive, global, and mission centric mindset as they grow towards fulfilling their unique and individual Portrait of a Sacred Heart graduate.

All entering Grade 10 students will embark upon the SHELL program with a distinctive look at our goals, our yearly theme and how students are at the centre of our Sacred Heart family and community.



Grade 11 and 12 students may elect to continue the program beyond their entry in Grade 10. Along with their core academic offerings, students will be mentored and empowered by faculty and peers, as they perform service to their community, attend a retreat together, continue to learn cultural competency, participate in our Network Exchange, master language and explore topics of truth and reconciliation, radical kinship and what sets a Sacred Heart student apart from their peers.

In Grade 11, advancing SHELL students can decide whether they will work towards the certificate or diploma before graduation in Gr 12. Additional opportunities such as student leadership and mentorship, Network Exchange and engagement, Duke of Ed, One Schoolhouse online courses, advanced language study, service and cohort retreat outings differentiate the two levels. Students will have the opportunity in their University Prep classes to discuss their growth and keep a digital journal of their progress.

In Grade 12, SHELL students will complete all of their initiated projects at either the certificate or diploma level, mentor their peers in Gr 10 and 11, as well as present to our school community at a Gala event in the spring, celebrating their achievements, their growth and contributions to Sacred Heart and how they plan to unveil and live out their unique Sacred Heart portrait to a world that awaits them.



Course Descriptions

Arts - Fine and Performing

SENIOR HIGH

This is a required course that completes the Arts credit for High School graduation; students will choose between the Performing Arts, Music and the Visual Arts.

Grade 10 – Performing Arts Drama: This is a required course that completes the 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 - Art: This is a required course for completion of a high school diploma. 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.

Students may also participate in the Performing Arts Club (PAC).

Band

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.



English

Students in grades 7 through 12 will develop their reading, writing, listening, speaking, researching, and creative thinking skills. They will read and creatively interpret drama, and they will write essays, short stories, and poetry. Each grade level engages with at least one classical text, often Shakespeare. Film studies are incorporated to enhance reading experiences. Beyond the assigned curriculum, students will also be expected to read independently. Students are encouraged to make independent reading selections and to read widely.

The English Program provides opportunities for students to explore and to appropriately use technological resources and interact with a variety of media. When possible, students will have the opportunity to experience professional theatre by attending local productions. Guest speakers/writers will be invited to read/share their knowledge, experience, or work. When possible, writing workshops given by authors/writers are made available to interested students.

Evaluation and assessment are on-going and include oral, visual, and creative components, as well as traditional expository writing assignments.

SENIOR HIGH

English 10: The aim of the Grade 10 English course is to enrich the students' ability to think critically about literature and to teach how a writer's choices work to convey meaning. Through this academic program, students examine structures and features of multiple genres, including drama, poetry, short stories, novels, speeches and advertisements. In addition, students will engage in a number of writing, reading and presentation activities to develop their communication skills, including expressive and creative writing. Fostering enthusiasm and an appreciation for effective and powerful writing, this course encourages each student to develop their own potential as communicators.

English 11: In the English 11 course, students will read and appreciate a wide selection of literature. Students will further develop their ability to read and deconstruct short stories, speeches, poetry, plays and non-fiction texts. Students are offered opportunities to improve writing skills through creative writing activities, literary responses, and expository essays. Throughout the year, students will enhance their knowledge and understanding of literary features and techniques, deepening their comprehension of authorial intent and their ability to critically analyze texts.

AP English 11: AP English 11 is an advanced program of study with demanding expectations. This is a course for motivated students with an enthusiasm for English. The aim of this course is to widen and deepen the students' critical thinking through the development of their analytical skills, to expand their capacity for communicating with precision, and to enrich their appreciation of the beauty and power of language. Students are encouraged to explore the use of language in light of the approaches taken by other writers, in fiction and non-fiction formats. Through this study of language in its various forms and styles, students will increase their comprehension, literacy, writing, research, and oral skills. Students in this course may write the AP Language and Composition exam (in early May). Usage and vocabulary are studied in context on a regular basis. Prerequisite: English 10 with an average of 85% or by permission from the teacher. AP English 11 is a prerequisite for AP English 12.



English 12: In the English 12 course, students will engage in the study and appreciation of literature. They become familiar with some of the world's classics and study some contemporary fiction. Students are encouraged to think critically about the various texts presented. Students participate in formal written assignments such as essays, as well as creative and dramatic interpretations of texts. There is opportunity for informal and formal oral presentations. Throughout the year, students work on expanding their comprehension as readers and their clarity as writers. Usage and vocabulary are studied on a regular basis.

AP English 12: This course is designed to build on the work students did in AP English 11. Students will engage in an in-depth study and appreciation of poetry, novels, short stories, and plays. They will become familiar with some of the very best literature and learn to appreciate not only the aesthetic qualities of the work, but the craft of writing that each work illuminates. Students are expected to think critically about the various texts they read and to participate in class discussions. Students participate in formal written assignments such as essays, as well as creative and dramatic interpretations of texts. There is opportunity for informal and formal oral presentations. Students in this course may write the AP Literature and Composition exam (in early May). Prerequisite: AP English 11 or by permission from the teacher.



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.

Senior High

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.



French

SENIOR HIGH

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 class begins with a general review of the Junior High Programme and then some new structures and topics are gradually introduced. Students read a variety of texts that focus on different areas of francophone culture. These texts provide students with a variety of material for oral presentations and written reflection. Group and individual oral activities, presentations and films plus reinforcement of basic grammar and structures are important components of this course. 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 presentations, skits, role play, and daily classroom discussions. Students study many different themes through the reading of novels by Victor Hugo. 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): Grammar studied includes all common tense forms and basic grammatical structures. The subjunctif, 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 listen to French radio on her own. Literature studied will include *Le Petit Prince* by Saint-Exupéry, *Jeanne Fille du Roy* by Suzanne Martel and *Mon ami Frédéric* by Hans Peter Richter, as well as selected poetry and songs. The class also has the opportunity to write and perform short plays that will be presented to fellow french students. Students will broaden their knowledge of



Francophone culture, poets and musicians through formal oral presentations, essays, individual readings and 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.

French 12 (Advanced): A general revision of grammar is undertaken and 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 20th century, including two complete novels and a play, such as: Persepolis by Marjane Satrapi, Ru by Kim Thuy, L'Etranger by Camus, and one play by Molière Les Femmes Savantes. Each student is required to read one 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.

Both Gr 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.



Mathematics

The aim of this Program is to make mathematics enjoyable and challenging, and to prepare students to be successful in further studies which require an understanding of mathematics. The mathematics courses fulfill the requirements of the Program of Studies of the Nova Scotia Department of Education, with some additions. For example, students may take a full credit course in calculus in grade 12 to prepare them for university.

SENIOR HIGH

[Math Pathways in the Senior High](#) Please visit here for a flow chart on the Math program in Grades 10-12

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, right angle trigonometry, expanding polynomials, factoring polynomials, and solving quadratic equations by factoring. 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, vectors, trigonometry, analytic geometry, manipulating rational expressions and data management. 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.

Mathematics 11: Emphasis in this course is on consolidating and extending previously acquired concepts by emphasizing problem-solving and applications in the study of each topic. It fulfills the requirements for admission to most university and post-secondary programs that do not involve a calculus course. Topics include: geometry, trigonometry, statistical reasoning, linear inequalities, linear programming, quadratic functions and equations, and proportional reasoning. 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. Mathematics 10 (Advanced) is a prerequisite.

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% is recommended in Math 11 to enroll in this course.



Pre-Calculus 11 (Advanced): This course and Pre-Calculus 12 (Advanced) 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 options, inflation, risk, and time in the market. The term culminates using spreadsheets to make portfolio predictions. The focus of the second term is data analysis. Building on the spreadsheet skills developed in the first term, students learn how to graph data, add an appropriate trendline with a corresponding equation, 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. Students will also advance their skills in probability and be introduced to sequences and series. TI - 84 Plus CE (or similar) Graphing Calculators are used where applicable. Precalculus 11 is a prerequisite.

Pre-Calculus 12 (Advanced): The intent of this course is to amalgamate and build upon the algebra and geometry previously studied in grades 10 and 11. . Topics include graphing and analyzing a variety of functions and their transformations with a particular focus on exponential, logarithmic, and trigonometric functions. Students will also advance their skills in probability and statistics and be introduced to sequences and series. TI-84 Plus CE (or similar) graphing calculators are used throughout the course. Pre-Calculus 11 is a prerequisite.

AP Calculus 12: This course is offered as a full credit introductory course to University Calculus with a curriculum based upon the College Board Advanced Placement Calculus AB course. Students enrolled will have the opportunity to write the AP Calculus Examination in May for possible university credit or placement. 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. A final average of 80% is needed in Math 11 (Advanced) and Pre-Calculus 11 in order to enroll in this course.



PreCalculus 11/12: is a catch up course that will allow students whose pathways may have changed to complete the PreCalculus 11 and PreCalculus 12 courses in one year. Students must have completed Mathematics 11. Please note that this course may only be offered with sufficient enrollment for the 24-25 school year. Please select this course if this applies to you. If a student is interested and we are not able to offer this catch-up course formally, we will reach out to the student and family to discuss options.

Music

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.

Physical Education

SENIOR HIGH

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 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.

SENIOR HIGH

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, whilst 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 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, as they put into action the Christian principles they learn in the classroom.



Science

The goals of the junior and senior high Programs 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. The units of study are weather systems, sustainability, chemical reactions, and motion. 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. Learners will also investigate ecosystem sustainability, biodiversity and factors that affect ecosystems, including ways that humans can contribute to protecting the environment, and investigate motion in one dimension 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. 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.



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.

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 Behavior 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 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 also take 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.

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). Students taking this course must also take Pre-Calculus 12.



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 and 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, interference, 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 take Math 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.

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, 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). Students taking this course must also take Pre-Calculus 12.



Social Studies

The Social Studies Program throughout junior and senior high is global in nature and educates to a sense of social justice. Its aim is to make students aware of their world: its geography, history, economic, and sociological structures. Students are helped to locate and organize information, communicate orally and in writing, and to develop critical thinking and discussion skills.

SENIOR HIGH

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.

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 (AP): 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. 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.



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: 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 texts and readers are, Aula America 1, Bitacora 1 (v tex + online workbook) on Difusión Campus (online Spanish language content platform) easy Spanish Reader, Spanish language magazines, websites, podcasts and videos. Students will want access to a device for this class.

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 texts and readers are, Aula America 2, Bitacora 1 (v tex + online workbook) on Difusión Campus (online Spanish language content platform) easy Spanish Reader, Spanish language magazines, websites, podcasts and videos. Students will want access to a device for this class.

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.



Technology

Technology 10: The aim of this course is to explore technology in a global context. Students will build their technological literacy through activity and creation by problem solving and troubleshooting in a variety of contexts. Areas of study include: Technological Literacy, Research Skills, Keyboarding, G Suite Applications, History, Evolution, and Future Trends of Technology, Technological Systems and Problem Solving, Technological Responsibility, and Technology and Careers. Students will benefit from connecting with local organizations and engaging with professionals working in the field.

University Preparatory (Grades 10, 11 and 12)

University Preparatory Course: The purpose of this course is to assist students in their planning for their post-secondary education. Areas covered will include: career planning, transition from high school to university, the university application process, form-filling, resume-writing, and budgeting. The second term will focus on health and well-being while at university and during times of transition. This course is one period per week and it is a required course for all Grade 11 and 12 students. Grade 10 students will have this course one time every two week cycle, and it is also a required course.



One Schoolhouse Online Courses

Sacred Heart, along with a number of other leading CAIS and Sacred Heart schools, is pleased to offer the option to take some online credit courses through One Schoolhouse. In order for registration to happen, students must speak with Mr. Pinches, Vice-Principal, Academics, to discuss the potential course, whether it meets the requirement for a full credit, and how it fits into their program. These courses will generally be taken as an elective course.

For more information and to see the courses on offer, please visit <http://www.oneschoolhouse.org>

If you find a course that you would like to take, please email Mr. Pinches, Vice-Principal of Academics at cpinches@shsh.ca for further information will be provided regarding costs, registration, etc, along with discussing whether the course is suitable for the academic progress of the student.

