

Course Description Booklet

GRADES 10 - 12

2025-2026



**JOHN KNOX
CHRISTIAN
SCHOOL**



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Planning

Educational Planning

The purpose of this guide is to introduce students to the range of required and elective courses offered at JKCS. In the case of elective courses, this booklet provides some of the information needed to make thoughtful course selections. In senior secondary grades, the process of selecting courses should also be informed by consideration of post-secondary education plans.

The school's academic counsellor provides information, advice and counselling to assist in the selection of courses; however, ***it is the responsibility of each student to select and complete the appropriate sequence of courses leading to graduation and required for entrance into the specific post-secondary institutions and program of choice.***

Information on British Columbia's (BC's) graduation requirements can be found at:



https://www2.gov.bc.ca/assets/gov/education/administration/legislation-policy/legislation/schoollaw/e/m302_04.pdf

Post-secondary information can be found at:



<https://www.educationplannerbc.ca/>

Note About Course Offerings

Students are required to take a minimum of eight courses during the school year. Course availability is subject to enrollment numbers and administrative decisions. While every effort is made to accommodate course requests, we cannot guarantee that all first-choice selections will be available or that every course listed in this booklet will be offered each year.

Summer School/Graduation

Should I register for Summer School?

An increasing number of universities take into account the academic rigour of the courses taken. For example, University of British Columbia and University of Toronto require that applicants list all the schools where courses were completed, including summer and distance learning schools. The UBC and U of T recruitment advisors tell Academic Counsellors that courses taken in the summer or online are not considered as 'rigorous' as those taken during the normal school year, noting it is easier to earn top marks when a student is studying only one course at a time. For this reason, summer school courses may disadvantage your university application.

Students are advised to use the summer months to develop the personal profile aspects of their university applications.

The Graduation Program (Grades 10-12)

Schools in BC develop their programs by selecting courses from the Ministry of Education and Child Care approved options.

For more information, consult the BC Graduation Program Guide:



https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/graduation/handbook_of_procedures.pdf

External Credits

Students can be credited for completing courses, programs or activities that fall outside the normal BC school curriculum. For example, Grades 10, 11 or 12 graduation credits can be awarded for completing BC Conservatory of Music training or Bronze Cross Lifesaving Courses.

For more information, visit:



<https://www2.gov.bc.ca/gov/content/education-training/k-12/support/graduation/getting-credit-to-graduate/external-credentials>



University Application

Scope of University Application Requirements

Admissions' criteria at many universities and colleges may require more than the submission of completed courses and grade point averages. A detailed personal profile and an interview may also be a significant part of the application process.

Student profiles can include written responses describing:

- What is important to you and why
- Pursuits you undertook during high school (e.g. clubs, community responsibilities, creative arts, employment, athletics, service, and volunteering responsibilities)
- How your involvement in your school community impacted its culture and improved the experiences of fellow students
- How you responded to a problem or an unfamiliar situation
- How your family and friends describe you

For example, as stated on the University of British Columbia (UBC) website:

"The Personal Profile is a crucial section in your UBC application. This is your chance to tell us about the things that are important to you, your significant achievements, what you've learned from your experiences, and the challenges you've overcome. It's our chance to determine whether you're a good fit for UBC and if you'll receive an entrance scholarship." (Source: <https://you.ubc.ca/applying-ubc/how-to-apply/personal-profile/>)

UBC's holistic admissions process also considers the rigor, breadth, and depth of every applicant's academic program. "Therefore, choosing to include a Grade 11 foreign language and senior math course will not only provide stronger preparation for university study in ALL majors but also can present a stronger overall academic profile, boosting one's chance for UBC admission."

(Source: <https://www.optionssolutionsed.com/admissions/new-ubc-admissions-changes-for-2026-applications/>)

The information above represents the criteria that many universities and colleges take into consideration when reviewing applications. All JKCS students and their guardians should carefully review admissions details before applying to specific universities and programs.

At JKCS, we offer robust academic counselling services through our Academic Counselling (AC) Office. AC appointments can be arranged by emailing Mrs. Lund (jlund@johnknoxbc.org)

Senior Course Offerings

	Grade 10	Grade 11	Grade 12
Career Education & Christian Studies	• Career Life Education 10 / Christian Studies 10	• Career Life Connections 11 / Christian Studies 11	• Career Life Connections 12 / Christian Studies 12
English Language Arts	• English 10	• English 11	• English Studies 12
Languages	• French 10 • Mandarin 10 • Spanish 10	• French 11 • Mandarin 11 • Spanish 11	• French 12 • Mandarin 12 • AP Chinese Language & Culture 12 • Spanish 12
Social Studies	• Social Studies 10	• 20th Century World History 12 • BC First Peoples 12 • Human Geography 12	• Law Studies 12 • Philosophy 12 • AP Psychology
Sciences • One Science 11 or 12	• Science 10	• Chemistry 11 • Earth Sciences 11 • Life Sciences 11 • Physics 11	• Anatomy & Physiology 12 • Chemistry 12 • Physics 12 • Specialized Sciences 12
Mathematics • One Math 10 • One Math 11 or 12	• Foundations of Mathematics and Pre-calculus 10 • Workplace Mathematics 10	• Foundations of Mathematics 11 • Pre-calculus 11 • Workplace Mathematics 11 • Computer Science 11	• Foundations of Mathematics 12 • Pre-calculus 12 • AP Calculus AB • Apprenticeship Mathematics 12 • Computer Science 12
Applied Design, Skills, and Technologies • One Arts or ADST 10, 11 or 12	• Computer Studies 10 • Food Studies 10	• Accounting 11 • Food Studies 11 • Graphic Production 11	• Entrepreneurship 12 • Food Studies 12 • Graphic Production 12
Arts Education • One Arts or ADST 10, 11 or 12	• Art Studio 10 • Concert Band 10 • Concert Choir 10 • Vocal Ensemble 10 • Drama 10	• Art Studio 11 • Concert Band 11 • Concert Choir 11 • Vocal Ensemble 11 • Drama 11	• Art Studio 12 • Concert Band 12 • Concert Choir 12 • Vocal Ensemble 12 • Drama 12
Physical and Health Education	• Physical & Health Education 10	• Fitness & Conditioning 11	• Fitness & Conditioning 12 • Recreation Leadership 12
Other		• Teacher Assistant 11	• Teacher Assistant 12

For BC and JKCS graduation requirements, students must complete the **bolded** items as part of their courseload. In addition, students must also write the Numeracy 10, Literacy 10, & Literacy 12 Graduation Program Assessments.

Career Education & Christian Studies

Career Life Education 10 / Christian Studies 10 (4 credits)

This four credit course combines a locally developed Christian Studies course with the Ministry of Education and Child Care's Career Life Education Curriculum. The content is covered in a variety of formats which include lectures, Advisories, Chapels and off-site job-shadowing experiences.

Career Life Connections 11 / Christian Studies 11 (4 credits)

In the Career Life portion of this course, students consider how to incorporate their personal faith into their career-life pursuits and into their plans for life after secondary school graduation.

In Christian Studies 11, students participate in a range of Community Service Projects, including a local ministry experience that is designed in partnership with Christian ministries in Vancouver and the Lower Mainland.

**Note: Students may also opt to participate in an international cross-cultural experience. The destination of the international cross-cultural ministry experiences is subject to world events and available opportunities. Former students have partnered with local ministries in China, Guatemala, and Thailand.*



Career Life Connections 12 / Christian Studies 12 (4 credits)

The grade 12 Christian Studies Program supports the ongoing faith development of our graduating students. In addition, career-life development is supported by significant academic counselling and the extensive exploration of career options and post-secondary enrolment opportunities. Students also complete an adjudicated Graduation Transitions Portfolio.



English Language Arts

English 10 (4 credits)

This English course is designed to deepen an appreciation of how reading, writing, listening, speaking and media-viewing experiences enrich our lives. Students will develop a deepening awareness of how literature represents, perpetuates and influences culture. The curriculum also prepares students to write the Graduation Literacy Assessment 10 exam.

English 11 (4 credits)

This English course is designed to develop techniques that can be used to produce and analyze different genres of written work. Students will develop oral and written communication skills, examine a variety of literary genres and consider how encounters with literature can prepare them to engage and influence culture in ways that are compatible with a Biblical worldview. The literary units are used to introduce students to components of composition, creative writing, new media studies and the idioms of spoken language.

English Studies 12 (4 credits)

In English 12, students will continue to expand their essay writing skills and develop their critical thinking skills. Students will learn to examine and critique arguments posited by Christian and secular authors. They will explore works of Shakespearean and modern drama, novels, poetry, and non-fiction.



Languages

French

French 10 (4 credits)

Prerequisite: French 9

In French 10, students will continue learning to communicate effectively in French and will be exposed to various aspects of French culture. More complex language structures will be presented and there will be a greater emphasis on individual participation in class. Class instruction is in French.

French 11 (4 credits)

Prerequisite: French 10

The purpose of French 11 is to gain a level of spoken and written French that is valuable in everyday situations. Students will develop a confident ability to sustain their use of oral French. The curriculum increases students' exposure to and appreciation of French literature and culture. Class instruction is in French.

French 12 (4 credits)

Prerequisite: French 11

French 12 is designed for the serious and enthusiastic French student. Students will mature in their ability to use the language in higher level written and oral assignments, and must demonstrate strong individual participation and preparation in class. Students will do a thorough study of verb tenses and other grammatical structures for the purpose of learning how to communicate effectively in conversation and on paper. Students will also be exposed to various aspects of French culture through films, authentic documents and French literature. Students will continue to develop the four skills of reading, listening, speaking and writing.



Languages

Mandarin

Mandarin 10 (4 credits)

Prerequisite: Mandarin 9

This course is designed for students learning Mandarin as a second language, not for students with an extensive background in Mandarin. Mandarin 10 builds on the speaking, listening and writing activities learned in grade 7-9 Mandarin courses.

Mandarin 11 (4 credits)

Prerequisite: Mandarin 10

Mandarin 11 builds on the speaking, listening and writing activities learned in Mandarin 10.

Mandarin 12 (4 credits)

Prerequisite: Mandarin 11

Mandarin 12 builds on the speaking, listening and writing activities learned in previous Mandarin courses. Students will significantly improve their personal levels of fluency by the end of Grade 12.

AP Chinese Language and Culture 12 (4 credits)

Prerequisite: Mandarin 12 with a minimum grade of 80%

Fee: Students are responsible for paying the AP Exam fee

AP Chinese Language and Culture 12 is equivalent to the first year university Chinese Language course. The course aims to develop students' awareness and appreciation of the rich elements of the Chinese culture by engaging students in an exploration of both contemporary and historical Chinese culture. Throughout the program, students will sharpen their language skills across the three communicative modes: interpersonal, interpretive and presentational.

Students are strongly encouraged to write the AP exam in May. Students who do well on the AP exam can be awarded a first year language course credit at most universities.



Languages

Spanish

Spanish 10 (4 credits)

Prerequisite: Spanish 9

This course is designed for students learning Spanish as a second language, not for students with extensive background in Spanish. Students enrolled in this course will extend the development of the listening, speaking, reading and writing skills learned in grade 7-9 Spanish courses.

Spanish 11 (4 credits)

Prerequisite: Spanish 10

Spanish 11 builds on the listening, speaking, reading and writing skills learned in Spanish 10. At the end of the course, students should be able to handle survival situations, maintain a conversation in daily life contexts about activities, people, places and things. Students will be able to communicate in the present, past and future tense. Successful students can expect to have elementary proficiency by the end of the course.

Spanish 12 (4 credits)

Prerequisite: Spanish 11

Spanish 12 builds on the listening, speaking, reading and writing skills learned in Spanish 11. At the end of the course, students should be able to maintain a conversation in daily life contexts about activities, people, places and things. Students will engage with the language of the Bible in Spanish. Students will be able to communicate in the present, past and future tense. Successful students can expect to have intermediate working proficiency of Spanish upon completion of this course.

A dark, atmospheric image of a desk. In the foreground, an open book lies flat, its pages filled with text. To its right, a small, ornate desk lamp with a glass chimney and a metal frame stands. Further back, a stack of books is visible, with one book's spine clearly showing the word 'SPELLS'. A small, round, dark object, possibly a compass or a small clock, rests on the desk near the lamp. The overall lighting is dim, with a warm, yellowish glow emanating from the lamp, creating a scholarly and historical feel.

Social Studies

Social Studies 10 (4 credits)

Social Studies 10 will allow the students to gain an in-depth understanding of how Canada was formed as a nation. Topics include: Canada from the 1900s to 1920s, Canadian geography and the exploration of the Canadian West, the fur trade and the European effect on Native culture, an in-depth study of British Columbia, immigration in Canada, racism and prejudice, and Canadian government.

20th Century World History 12 (4 credits)

Prerequisite: Social Studies 10 recommended

History 12 looks at key events of the twentieth century (i.e. Mao's cultural revolution, the two World Wars, the Cold War) and answers to three overarching questions: How do nationalist movements unite people in common causes or lead to intense conflict between different groups? How did the rapid development and proliferation of technology lead to profound social, economic, and political changes? How did the breakdown of long-standing empires create new economic and political systems?

BC First Peoples 12 (4 credits)

In BC First Peoples 12, we will explore how the identities, worldviews, and languages of First Nations are renewed, sustained and transformed through their connection to the land. Students will investigate how the impact of contact and colonialism continues to affect the political, social, and economic lives of BC First Peoples. Finally, we will study how cultural expressions convey the richness, diversity, and resilience of BC First People's culture.

A dark, atmospheric image of a desk. In the foreground, an open book lies flat. To its right, a small, ornate clock with a round face and a decorative top sits on the desk. Behind the clock, a stack of books is visible, with one book's spine clearly showing the word 'SPELLS'. A lamp with a warm, yellow glow is positioned behind the books, casting light on the scene. The overall tone is scholarly and quiet.

Social Studies

Human Geography 12 (4 credits)

The course emphasis is on the interrelationship between people and their environment. Students will analyze data from a variety of sources to develop an understanding of how demographic patterns and population distributions are influenced by physical features and natural resources and how human activities alter landscapes in a variety of ways.

Law Studies 12 (4 credits)

Prerequisite: Social Studies 10 recommended

In Law 12, students explore the legal rights and responsibilities of citizens in Canada. Critical thinking and the examination of issues from many points of view are highlighted.

Philosophy 12 (4 credits)

Philosophy is a discipline that examines the nature of reality, existence, and knowledge. It exposes different ways of thinking and helps us make meaning in the world while questioning our assumptions about it. Philosophy deals with questions that do not appear to have definitive answers, thus reason and logic are used to show which answers have value. Topics touched on in this class may include philosophy, ethical theory, social and political philosophy, philosophy of art, religion, science, theory of knowledge and metaphysics or philosophy of the mind.

AP Psychology (4 credits)

Fee: Students are responsible for paying the AP Exam fee

Why do people act differently around various individuals? How do family and societal influences shape behaviours? AP Psychology explores foundational concepts that explain how and why individuals think and behave in certain ways.



Sciences

Science 10 (4 credits)

Science 10 explores how various parts of creation behave and helps students gain an appreciation for God as the Creator. An experimental approach will be used to investigate topics such as sustainability of ecosystems, chemical reactions and radioactivity, motion, energy transfer in natural systems and plate tectonics. In addition, lab safety, the scientific method, scientific literacy, ethical behaviour, cooperative skills, application of scientific principles and science related technology will be practiced.

Life Sciences (Biology) 11 (4 credits)

Prerequisite: Science 10 with a recommended minimum grade of 67%. Recommended to also have completed Foundations of Mathematics and Pre-calculus 10 with a minimum grade of 67%

This course equips students with a more in-depth knowledge of creation through studying the diversity of created organisms. Students will learn about the classification, diversity, structure and function of living things found on Earth, from the most basic to the most complex. Topics include cell biology, viruses, bacteria, fungi, genetics, plants, ecology, evolution and animals.

Chemistry 11 (4 credits)

Prerequisite: Science 10 and Foundations of Mathematics and Pre-calculus 10 with a recommended minimum grade of 67%. Pre-calculus 11 is taken prior to, or concurrently with, Chemistry 11.

Chemistry is the science that deals with the properties and reactions of materials. It is concerned with the identification, characterization, and transformations of matter, and with the energy changes accompanying these transformations. Students will study the mole concept, gases, stoichiometry, atomic theory, ionic equations, the electrical nature of matter, the periodic table, nuclear and organic chemistry. This is a challenging course requiring strong math skills.



Earth Science 11 (4 credits)

Earth Science 11 is a practical survey course designed to introduce students to the diverse aspects of earth and space science. Through the investigation of geologic processes, students will become aware of their role as custodians of our planet and develop an appreciation of the impact of human activities on both local and global environments.

Physics 11 (4 credits)

Prerequisite: Science 10 and Foundations of Mathematics and Pre-calculus 10 with a recommended minimum grade of 67%. Pre-calculus 11 is taken prior to, or concurrently with, Physics 11.

Physics 11 provides an introduction to the scope, nature, and relevance of physics. The main areas of study are:

- Motion in one dimension: displacement, velocity, acceleration
- Newton's Laws: how forces change the way objects move
- Momentum and energy: mechanical, heat, and nuclear energy
- Waves and vibrations: general wave theory, applications to light and sound waves

Anatomy and Physiology (Biology) 12 (4 credits)

Prerequisite: Recommended successful completion of Chemistry 11

Anatomy and Physiology 12 focuses on cellular biology and human biology, allowing students to develop an interest in and understanding of science. During laboratory work and experimental design projects, students explore how diverse body systems are integrated to maintain homeostasis.

Chemistry 12 (4 credits)

Prerequisite: Chemistry 11 and Pre-calculus 11 with a recommended minimum grade of 67%. Pre-calculus 12 is taken prior to, or concurrently with, Chemistry 12.

In Chemistry 12, students develop an understanding of how the principles of chemistry affect the world around them and aspects of their everyday lives. Students will learn about reaction kinetics, dynamic equilibrium, solubility equilibrium, acids, bases and salts, and oxidation-reduction. The study of chemistry is often foundational to future studies in biology, medicine and materials engineering.

Physics 12 (4 credits)

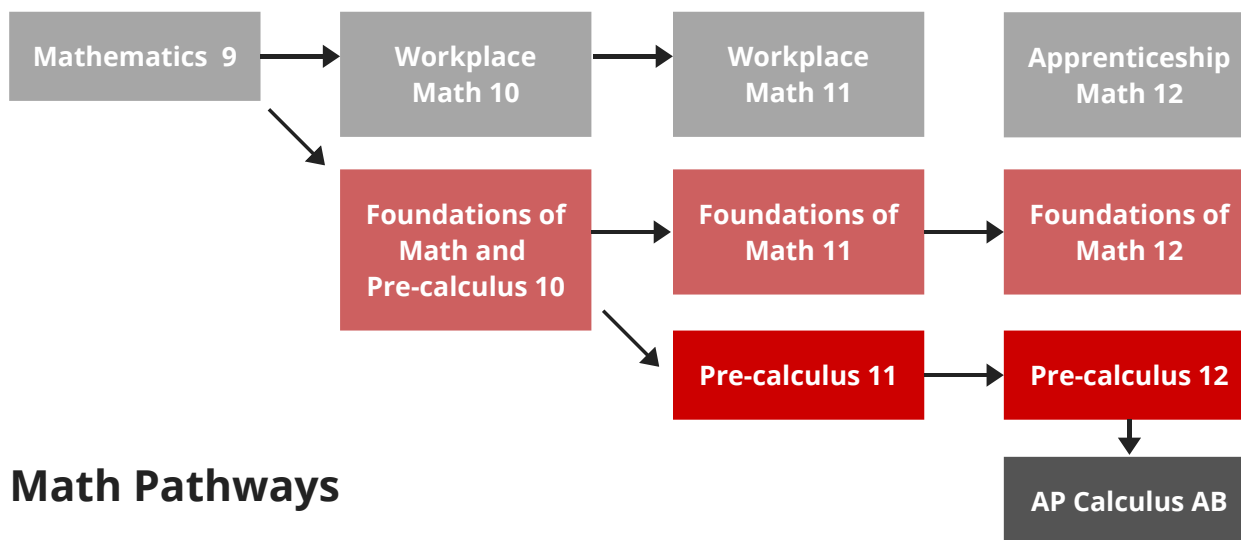
Prerequisite: Physics 11 and Pre-calculus 11 with a recommended minimum grade of 67%. Pre-calculus 12 is taken prior to, or concurrently with, Physics 12.

Physics 12 is the study of classical mechanics and electromagnetism, and is designed to help students develop analytical and problem-solving skills. The course provides opportunities for students to understand and apply the principles and concepts of physics to practical situations. Proper laboratory skills and safety measures will be stressed. The main topics include: vectors, motion in two dimensions, circular motion and gravitation, charges and currents, electromagnetism. The study of physics is often foundational to future studies in engineering, and architecture.

Specialized Science 12 (4 credits)

In Specialized Science 12, students engage in collaborative approaches to research, reporting, and scientific inquiry. Students explore how various disciplines in the field interact to form the basis of large-scale inquiry projects, where Science competency skills are put into practice in each stage of the process. Students work in small groups to develop research questions, follow resulting lines of inquiry, and present their findings in the form of an academic research paper or journal article. Interested applicants must be self-motivated and prepared for a high level of engagement and academic rigour.

Mathematics



Math Pathways

Choices in Mathematics starting in Grade 10

There are several options for math courses starting at the Grade 10 level. Each pathway is designed to provide students with the mathematical understandings and critical-thinking skills that have been identified for specific post-secondary programs of study and for direct entry into the workforce.

The different course offerings allow students to focus and specialize on mathematical topics and skills that match their interests, and future education and career plans. Just as Biology, Chemistry and Physics are different courses with different content, the math courses at each grade level contain **different content and concepts**. For more information about math course options, see Mrs. Lund and visit the Ministry of Education and Child Care website at:



<https://curriculum.gov.bc.ca/curriculum/mathematics>.

Post-Secondary Requirements

Mathematics requirements vary for specific institutions and post-secondary programs.

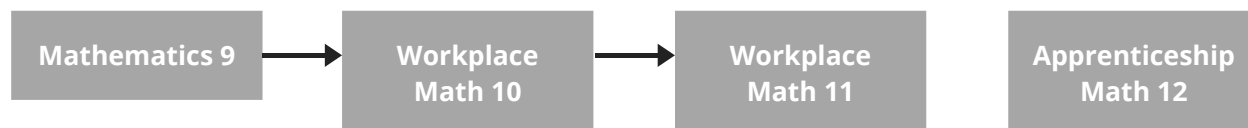
Students are encouraged to learn about specific prerequisite program requirements, by consulting calendars and websites for specific institutions, by booking an academic counselling appointment with Mrs. Lund, and by reading and understanding information on the 'Education Planner' website.



<https://www.educationplannerbc.ca/>

Mathematics

Workplace Mathematics



In order to meet the challenges of society, high school graduates must be mathematically literate. They must understand how mathematical concepts permeate daily life, business, industry, government, and their thinking about the environment. Workplace Mathematics provides the mathematics identified as important for direct entry into the workforce.

Workplace Mathematics 10 (4 credits)

Prerequisite: Mathematics 9

Topics include measurement and conversion, proportional reasoning, 2D geometry, graphical representations, central tendency, experimental probability, right angle trigonometry, and personal finance.

Workplace Mathematics 11 (4 credits)

Prerequisite: Workplace Mathematics 10

Topics include rates of change, interpretation of graphs, statistics and probability, 3D geometry, and investments and loans.

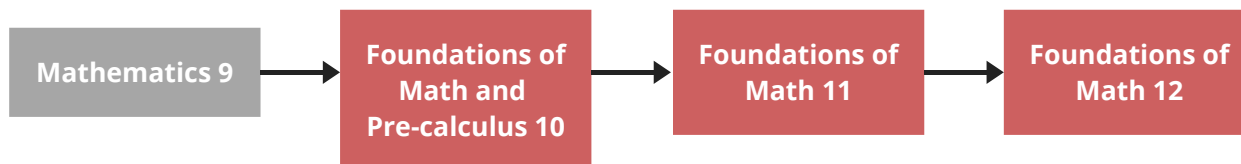
Apprenticeship Mathematics 12 (4 credits)

Prerequisite: Workplace Mathematics 11, or Foundations of Mathematics & Pre-calculus 10

Apprenticeship Math 12 is a course that focuses on the core math skills identified as necessary for entry into the majority of trades. Topics include measurement, 2D and 3D geometry, technical drawings, right angle trigonometry, and small business finance. This course may include more project-based learning and may involve interviews and research related to a field of interest.

Mathematics

Foundations of Mathematics



The Foundations of Mathematics stream is designed for students who will require a broader knowledge of applied mathematics for post-secondary studies in programs that do not require the study of theoretical calculus.

Foundations of Mathematics and Pre-calculus 10 (4 credits)

Prerequisite: Mathematics 9

Foundations of Mathematics and Pre-calculus 10 is a course that leads to either Foundations of Math 11 or Pre-calculus 11. In this course, students will begin to combine their knowledge of mathematics into tools which can be used in understanding the patterns and order of our created world. Topics include right angle trigonometry, polynomials, exponents and radicals, arithmetic sequences and series, and linear functions and systems.

Foundations of Mathematics 11 (4 credits)

Prerequisite: Foundations of Mathematics and Pre-calculus 10

Topics include logic and reasoning, geometry, statistics, 2D and 3D scale models, linear inequalities and optimization, financial mathematics, and quadratic functions and systems.

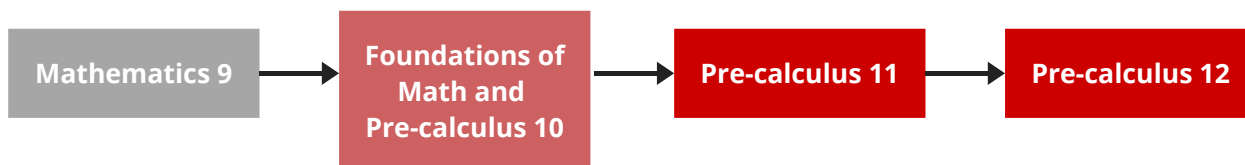
Foundations of Mathematics 12 (4 credits)

Prerequisite: Foundations of Mathematics 11

Topics include set theory, counting methods, investment and loan finance, probability, and functions and relations.

Mathematics

Pre-calculus (Starting at Grade 11)



The primary purpose of Pre-calculus is to give students the opportunity to delve into the intricacies of mathematics identified as important for post-secondary studies in programs that require the study of theoretical calculus, such as economics, science, or engineering.

Foundations of Mathematics and Pre-calculus 10 (4 credits)

Prerequisite: Mathematics 9

Foundations of Mathematics and Pre-calculus 10 is a course that leads to either Foundations of Math 11 or Pre-calculus 11. In this course, students will begin to combine their knowledge of mathematics into tools which can be used in understanding the patterns and order of our created world. Topics include right angle trigonometry, polynomials, exponents and radicals, arithmetic sequences and series, and linear functions and systems.

Pre-calculus 11 (4 credits)

Prerequisite: Foundations of Mathematics and Pre-calculus 10

Topics include financial literacy, trigonometry, functions and equations, and linear and quadratic inequalities and systems.

Pre-calculus 12 (4 credits)

Prerequisite: Pre-calculus 11

Topics include properties and transformations of functions, function operations, and trigonometry.

Mathematics

Calculus

Pre-calculus 12



AP Calculus AB

AP Calculus AB (4 credits)

Prerequisite: Pre-calculus 12 with a recommended minimum grade of 80%, or Pre-calculus 11 with a recommended minimum grade of 80% and the capacity to take Pre-calculus 12 concurrently with AP Calculus AB.

Fee: Students are responsible for paying the AP Exam fee

Topics in this course include limits, derivatives and their applications, the Fundamental Theorem of Calculus, and definite and indefinite integrals and their applications.

Note: This course is designed for students planning to enroll in commerce, science, or engineering programs at the post-secondary level. The course provides a thorough preparation for university level calculus but is not required for admission to most programs. Students are strongly encouraged, but not required, to write the AP Calculus exam in May.

Computer Science

Computer Studies 10 (4 credits)

Computer Studies 10 gives a broad overview of computing, hardware, software and applications, operating systems and networking, security, maintenance and troubleshooting, programming concepts, and digital literacy. Students also explore how the design process should be driven by the needs and interests of the end user, and ethical considerations of how traditional and modern computing influences the health and well-being of societies and individuals.

Computer Science 11 (4 credits)

Prerequisites: Foundations of Mathematics and Pre-Calculus 10

In Computer Science 11, students will learn basic programming concepts including basic data types, logical statements, control structures, modular design, scope, and array and list operations. Students will also learn to develop algorithms to model mathematical problems and to solve problems in different ways. No prior coding experience is required to enter this course; however, students who are well-versed in, and confident with, algebra will be prepared for the abstract computational challenges that this course provides.

Computer Science 12 (4 credits each)

Prerequisites: Computer Science 11

Computer Science 12 continues to develop a student's knowledge and ability in programming. Topics include memory access and management, custom data structures and classes, multidimensional arrays. Students will also use searching and sorting as avenues for learning more ways to design algorithms, including recursion and encapsulation, taking into consideration run-time performance and scalability.

Accounting 11 (4 credits)

In this course, students will develop an understanding of how services and products can be designed through consultation and collaboration and how tools and technologies can be adapted for specific purposes. Students will also gain financial literacy skills in a variety of topics such as the relationship between debt and credit, accounting equations and principles, and accounts payable and receivable.

Entrepreneurship 12 (4 credits)

Entrepreneurship 12 is designed for students interested in business principles related to the ownership and management of a business. Students begin by evaluating inventions and innovative ideas. They learn about the processes involved in planning, marketing, and implementing a venture.

Graphic Production 11 and 12 (Yearbook) (4 credits each)

Students work cooperatively as a team to meet deadlines in producing the yearbook. Throughout the design and production process, students explore image development technologies, how to use elements and principles of design as communication tools, and the balance of form and function. Students will be instrumental in taking digital photographs, compiling and formatting the photographs, designing layouts and working with the Yearbook publisher.

Food Studies 10, 11, and 12 (4 credits each)

Food Studies 10, 11, and 12 are interactive courses that make students aware of local and global food cultures and trends. These courses provide hands-on experiences with a wide variety of foods, creating opportunities for risk-taking, ideating, prototyping and producing re-created and original products. Students will develop subject-specific research and writing techniques that are useful in secondary and post-secondary settings.



Arts Education

A minimum of ONE Arts Education or ADST course must be taken in grades 10-12 to meet graduation requirements.

Fine Arts/Drama

Art Studio 10, 11, and 12 (4 credits each)

Students will imaginatively and creatively express themselves as image-bearers of God, and will experiment with a wide variety of art-making techniques. They will grow as artists by focusing on art-making processes through experimentation, perseverance, and self-evaluation. Students will continue to develop a richer imagination by adding progressively more complex technical skills to the development of ideas. They will learn critical thinking skills by talking and writing about art, develop keen eyes and visual understanding by closely looking at the world around them, and develop skills to manipulate a variety of expressive artistic mediums.

Drama 10, 11, and 12 (4 credits each)

Drama allows students to develop acting skills and to create in-character class presentations. Students also participate in a wide variety of activities to improve their concentration, confidence and creativity. Students are encouraged to participate in performances to gain an understanding of basic stage use and story or script development.



Arts Education

A minimum of ONE Arts Education or ADST course must be taken in grades 10-12 to meet graduation requirements.

Music

Concert Choir 10, 11, and 12 (4 credits each)

The main goal of Concert Choir is singing music in every class rehearsal. Throughout the year, students will perform repertoire from a variety of choral styles and eras in multi-part harmony. Students will also develop basic music-reading and ear-training skills.

Vocal Ensemble 10, 11, and 12 (4 credits each)

Co-requisite: students must also be enrolled in Concert Choir 10, 11 or 12

In Vocal Ensemble, students will be practicing and performing a wide variety of jazz, pop and modern musical styles. Students will be challenged to develop their vocal and musical skills, with a focus on independent part-singing and individual rehearsal preparation. Students will also learn about microphone technique and the unique challenges provided when singing “on-system”.

Concert Band 10, 11, and 12 (4 credits each)

Prerequisite: minimum two years previous participation in Concert Band or instructor’s permission

In Concert Band 10, 11, and 12, students continue to hone their musical skills and technique on their individual instruments. There is an emphasis on developing a more mature and cohesive ensemble sound year-to-year.

Other ensembles, such as Jazz Band and Strings, will be offered as clubs, based on student interest.

Physical and Health Education



Physical and Health Education 10 (4 credits)

In Physical and Health Education 10, students participate in a variety of team and individual activities that encourage healthy and enduring lifestyle habits that will positively support their physical, emotional, and mental well-being. The goal is to learn that physical fitness can be maintained and improved through regular participation in physical activities.

Fitness and Conditioning 11 and 12 (4 credits each)

Prerequisite: Physical and Health Education 10 with a minimum grade of 80% or instructor's permission

Fee: Students will be responsible for paying fees for any special events or activities

Fitness and Conditioning 11 and 12 focus on supporting and encouraging students to follow a healthy, active lifestyle path. Individual students will design and implement their training paths, and are expected to monitor and assess the effectiveness of their plans in relation to their personal goals. Students will explore basic anatomy and physiology, proper training techniques and safety practices, while exploring current trends and research in fitness, including strength-training and sport-specific training.

Recreational Leadership 12 (4 credits)

Prerequisite: Physical and Health Education 10 with a minimum grade of 80% or instructor's permission

Fee: Students will be responsible for paying fees for any special events or activities

Recreational Leadership 12 develops leadership skills that assist the Physical Education department in running its programs. Students may be required to attend athletic program activities in the evenings. They also assist in running lunch hour intramurals and weekend tournaments.

This class meets 2-3 times per week outside the regular timetable.



Other Offerings

Teacher Assistant 11 and 12 (4 credits each)

Prerequisite: Registration is by application and requires the approval of a sponsor teacher.

Students in this course gain experience by working closely with one teacher. Administrative and teaching activities may include working in a class as a tutor, preparing bulletin boards, performing administrative duties and grading quizzes. The nature of the work depends on the teacher's preferences, the subject area being supported, and the abilities of the Teacher Assistant (TA).

Teacher Assistant 12 has a greater emphasis on preparing and delivering lesson and assessment content.