# 2024-2025 Course Calendar





# **TABLE OF CONTENTS**

#### **General Information**

**Diploma Requirements** 

**Types of Courses** 

French Immersion Certificate

**Co-Operative Education** 

**Dual Credit Program** 

Specialist High Skills Major (SHSM)

**MyBlueprint** 

#### **Grade 9 Program**

**Grade 9 Course Selection Planning Form** 

**Grade 9 Course Descriptions** 

#### **Grade 10 Program**

**Grade 10 Course Selection Planning Form** 

**Grade 10 Course Descriptions** 

#### **Grades 11 and 12 Program**

Grade 11 and 12 Course Descriptions

Grade 11 and 12 Course Selection Planning Form

**Online Course Offerings** 

# **DIPLOMA REQUIREMENTS**

AN ONTARIO SECONDARY SCHOOL DIPLOMA (OSSD) WILL BE GRANTED to a student who earns a minimum of 30 credits.

#### **19 Compulsory Credits**

Students must earn the following compulsory credits to obtain the OSSD:

- 4 credits in English (1 credit per grade)
- 3 credits in mathematics (at least 1 credit in Grade 11 or 12)
- 2 credits in science
- 1 credit in Canadian history
- 1 credit in Canadian geography
- 1 credit in the arts (music, visual art, drama)
- 1 credit in health and physical education
- 1 credit in French as a second language
- ½ credit in civics and ½ credit in career studies
- 1 credit in Technological Education (\*new for students starting grade 9 in 2024\*)

#### PLUS ONE CREDIT FROM EACH OF THE FOLLOWING GROUPS:

- 1 additional credit in English, or French as a second language, or a Native language, or a classical or an international language, or social sciences and the humanities, or Canadian and world studies, or guidance and career education, or cooperative education
- 1 additional credit in health and physical education, or the arts, or business studies, or French as a second language, or cooperative education
- 1 additional credit in science (11 or 12), or technological education, or French as a second language, or computer studies, or cooperative education

#### IN ADDITION TO THE COMPULSORY CREDITS, STUDENTS MUST COMPLETE:

#### 11 Optional Credits

- 40 hours of community involvement activities
- the provincial literacy requirement
- beginning with students that entered Grade 9 in the 2020-21 school year, students must earn at least two online learning credits. Parents who wish to opt out or exempt their child from the online graduation requirement must complete the opt-out form available from the school board.



## TYPES OF COURSES

#### **CHOOSING COURSES FOR GRADES 9 AND 10**

Students entering grade 9 and 10 will choose courses of one or more types: De-streamed, Academic, Applied, Locally Developed Compulsory Credit, and Open. They will make their choices based on their goals, interests, learning preferences, needs and achievement. The following is a brief description of the types of courses that are available in the different subjects.

**De-streamed** courses are only offered in grade 9 and support equitable outcomes for all learners. They combine what were previously the Academic and Applied courses. Students will not need to select Academic or Applied pathways until grade 10.

**Academic** courses develop students' knowledge and skills through the study of theory and abstract problems. These courses focus on the essential concepts of a subject and explore related concepts as well. They incorporate practical applications as appropriate.

**Applied** courses focus on the essential concepts of a subject and develop students' knowledge and skills through practical applications and concrete examples. Familiar situations are used to illustrate ideas, and students are given more opportunities to experience hands-on applications of the concepts and theories they study.

**Locally Developed** courses focus on literacy, mathematical literacy, essential job skills and essential concepts. These courses are available in English, Mathematics and Science only. These courses are specially designed for students who have been working on expectations that are below the course grade level and enrollment into these courses is based on teacher and principal recommendation.

**Open** courses comprise a set of expectations that are appropriate for all students and are designed to broaden students' knowledge and skills in subjects that reflect their interests and prepare them for active and rewarding participation in society. They are not designed with the specific requirements of university, college, or the workplace in mind.



#### **CHOOSING COURSES FOR GRADES 11 AND 12**

In grades 11 and 12, courses prepare students for their post-secondary destinations including: university preparation courses, university/college preparation courses, college preparation courses, and workplace preparation courses. Open courses are also offered in Grades 11 and 12. The following is a brief description of the types of courses that are available in the different subjects.

**College** preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for most college programs or for admission to specific apprenticeship or other training programs.

**University/College** preparation courses are designed to equip students with the knowledge and skills they need to meet the entrance requirements for specific programs offered at universities and colleges.

**University** preparation course provide students with the knowledge and skills they need to meet university entrance requirements. Courses emphasize theoretical aspects of the subject and consider related applications.

**Workplace** preparation courses are designed to equip students with the knowledge and skills they need to meet the expectations of employers, if they plan to enter the workforce directly after graduation, or the requirements for admission to certain apprenticeship or other training programs.

**Open** courses comprise a set of expectations that are appropriate for all students and are designed to broaden students' knowledge and skills in subjects that reflect their interests and prepare them for active and rewarding participation in society. They are not designed with the specific requirements of university, college, or the workplace in mind.



# RUSSELL HIGH SCHOOL FRENCH IMMERSION CERTIFICATE

To obtain the FULL French Immersion French Certificate, students must complete <u>four</u> language courses (FIF1D, FIF2D, FIF3U and FIF4U) and a minimum of <u>six</u> courses in other subjects taught in French.

The following table outlines the French Immersion course that Russell High School offers at each level.

Grade 9 courses	FIF1D – French Immersion
	CGC1DF – Geography**
	PPL1OF – Physical Education
	GLS1OF – available only as a summer online course
Grade 10 courses	FIF2D – French Immersion
	CHC2DF – History**
	CHV2OF/GLC2OF – Civics and Careers
	PPL2OF – Physical Education
Grade 11 courses	FIF3U – French Immersion
	PPL3OF – Physical Education
	IDC4OF – LINK Crew – French Immersion
	Co-op Education in French (2 credits)
	A selection of online senior French courses are also available each year.
Grade 12 courses	FIF4U – French Immersion
	PPL4OF – Physical Education
	IDC4UF – LINK Crew – French Immersion
	Co-op Education in French (2 credits)
	A selection of online senior French courses are also available each year.

# CO-OP

Cooperative education provides opportunities for secondary students to participate in an unpaid work placement in order to apply classroom learning to a workplace and explore possible career choices. Students can take co-op in grades 11 or 12.

- 2 credit half day work placement placement must be within walking distance of the school
- 4 credit full day work placement

The Cooperative education program is a great way to test out a career option and gain job experience.





## **DUAL CREDIT PROGRAM**

# Earn College Credits for Free

Dual credit programs allow eligible students in high school to take college or apprenticeship courses that count towards:

- their Ontario Secondary School Diploma
- a postsecondary certificate, diploma, degree or a Certificate of Apprenticeship

High school students taking dual credit courses benefit from the supervision and support of their college instructor and the dual credit teacher at their school. Students also have access to a variety of college supports and services.

The dual credit program is available through Algonquin College - Ottawa. Students who desire learning opportunities outside of high school and who would benefit from a college or apprenticeship experience are suitable candidates. To ease scheduling, many students take their dual credit course in conjunction with their high school co- operative education course.

Some examples of dual credit courses available to UCDSB students include:

- Business Computer Applications
- Heath and Wellness for Children
- Introduction to Baking & Pastry
- Introduction to Residential Construction

This is an excellent opportunity for senior students to transition to post-secondary education while still in high school. **Applications into these programs must be planned well in advance.** For more information, please contact your Guidance Counsellor.



# SPECIALIST HIGH SKILLS MAJOR

The Specialist High Skills Major is part of the Student Success Strategy initiative which focuses on expanding quality learning opportunities and supporting success for all students. The SHSM is a Ministry approved specialized program that allows students to focus their learning on a specific economic sector while meeting the requirements for the OSSD. This career focused program is also designed to help prepare students to make the transition from secondary school to apprenticeship training, college, university, or the workplace. An SHSM enables students to gain sector specific skills and knowledge in the context of engaging, career related learning environments.

#### **Business SHSM**

This SHSM enables students to build a foundation of sector-focused knowledge and skills before graduating and entering apprenticeship training, college, university, or an entry-level position in the workplace. Where local circumstances allow, boards may elect to offer one or more variants of the SHSM in a given sector, each with a particular area of focus. This SHSM may be designed to have a particular focus – for example, on entrepreneurship, finance, accounting, retail, marketing, international business, economics, management and administration, or event planning. This focus is achieved through the selection of the four major credits in the bundle.

#### **Transportation SHSM**

This SHSM provides students with a strong foundation for a wide variety of careers in the transportation sector, from those focusing on the service, repair, and modification of vehicles and vehicle systems to those related to the organization and management of transportation services and mass-transit systems. The SHSM—Transportation enables students to build a foundation of sector-focused knowledge and skills before graduating and entering apprenticeship training, college, university, or an entry-level position in the workplace.

Consult with your Guidance Counsellor if you are interested in our High Skills Major programs.



# MY BLUEPRINT STUDENT ACCOUNTS

My Blueprint is an education and career planning tool used by students. Each student will have their own online account where students can:

- Research career options
- Track credits and grades
- Find information about courses offered in each grade
- Follow progress towards graduation
- Complete course selection for the following year
- Plan and save a resume for future updates

Students can log directly into their MyBlueprint account when on a school computer.

From home, go to <a href="https://www.Myblueprint.ca/UCDSB">www.Myblueprint.ca/UCDSB</a> for account access.

All students will complete their course selection in their MyBlueprint accounts.

A course selection sign-off sheet will be printed and must be signed by parents/guardians.

# **GRADE 9 PROGRAM**

We strongly encourage parents and students to consider their options carefully and consult with teachers and guidance counsellors before making a final decision. Teachers have very good insight as to which level would be appropriate.

Most grade 9 courses are compulsory credits for the Ontario Secondary School Diploma. Students in Grade 9 take 8 credit courses. Students require 30 credits to graduate with an Ontario Secondary School Diploma.

Choices should be based on a student's current level of achievement, teacher recommendation, and pathway planning.

#### What is De-streaming?

De-streaming means that students entering grade 9 will no longer be separated into Academic and Applied Streams. Students will take a combination of courses made up of De-streamed, Academic and Open level courses. Locally developed courses will still be available for some students as well.

De-streamed, Academic and Open courses will prepare students for university, college, apprenticeship and workplace pathways, providing more post-secondary options for our students.

#### What is Locally Developed/Essential?

Essential courses support the needs of some students who have been receiving significantly modified curriculum content in Grade 8. These courses accommodate educational and/or career preparation needs that are not met through other courses. Students who complete Locally Developed courses in Grade 9 and 10 are being prepared to go directly into Grade 11 Workplace courses, which lead to employment and/or apprenticeship opportunities after high school.

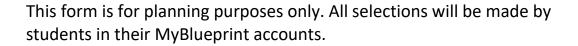
Students who are pursuing a college or university program should be aware that Locally Developed and/or Open courses do not meet the criteria for admission to these post-secondary institutions.

#### **French Immersion Certificate**

Grade 9 students who are enrolled French Immersion and are pursuing the French Immersion Certificate should select the following elective courses to fulfill the 10 courses required for the Certificate - **CGC1DF**, **PPL1OF** and **FIF1DF**.



# **Grade 9 Course Selection Planning Form**





Course descriptions can be found on the following pages.

	Course	Options	Course Code	<b>✓</b>
1	English	De-streamed	ENG1D	
		Locally Developed	ENG1L	
2	Mathematics	De-streamed	MTH1W	
		Locally Developed	MAT1L	
3	Science	De-streamed	SNC1W	
		Locally Developed	SNC1L	
4	Geography	De-Streamed	CGC1D	
		French Immersion	CGC1DF	
5	French	Core	FSF1D	
		French Immersion	FIF1D	
6	Physical Education	Open	PPL1O	
6	Physical Education	Open French Immersion	PPL1O PPL1OF	
7	Physical Education  Arts: Students will take	•		
	·	Open French Immersion	PPL1OF	
	Arts: Students will take	Open French Immersion Visual Arts Focus	PPL1OF	
	Arts: Students will take one art course as an	Open French Immersion Visual Arts Focus Drama Focus or	PPL1OF	
	Arts: Students will take one art course as an elective and are asked to	Open French Immersion Visual Arts Focus Drama Focus or	PPL1OF	
	Arts: Students will take one art course as an elective and are asked to order their choices from	Open French Immersion Visual Arts Focus Drama Focus or	PPL1OF	
7	Arts: Students will take one art course as an elective and are asked to order their choices from first to last.**	Open French Immersion  Visual Arts Focus  Drama Focus or  Music Focus	PPL1OF	
7	Arts: Students will take one art course as an elective and are asked to order their choices from first to last.**  Technologies: Students	Open French Immersion  Visual Arts Focus Drama Focus or Music Focus  Technology and the Skilled	PPL1OF NAC1O	

#### **GRADE 9 COURSE DESCRIPTIONS**

(BEM10) Building the Entrepreneurial Mindset, Grade 9, Open (BEM10) In this course, students will learn what makes an entrepreneur thrive and the skills required to succeed in today's business environment. Students will begin to develop their own entrepreneurial mindset, and learn why it's important to take initiative, adapt to change, find creative solutions, and understand the financial considerations of entrepreneurship. This hands-on course will use business software and applications to help students plan and develop their entrepreneurial ideas and learn how to present them to a target audience. Throughout the course, students will enhance their communications skills as well as develop and refine their project management skills, including goal setting, time management, and networking.

(CGC1W) Exploring Canadian Geography, Grade 9, De-streamed This course builds on learning in Grades 7 and 8 in geography. Students will explore relationships within and between Canada's natural and human systems and how they interconnect with other parts of the world. Students will also examine environmental and economic issues, and their impact related to topics such as natural resources and industries, careers, land use and responsible development, and sustainability. In addition, students will understand the connections that diverse communities and individuals have with the physical environment and each other throughout Canada, including First Nations, Métis, and Inuit perspectives. Students will apply geographic thinking, use the geographic inquiry process, and use geospatial technologies throughout their investigations.

(ELS2O) Literacy Skills: Reading and Writing This course is designed to help students strengthen essential reading and writing skills, providing them with the extra literacy support they need in order to graduate. Students will read informational, graphic, and literary texts, with a focus on locating information, identifying main ideas and supporting details, building vocabulary, and consolidating skills in the application of key comprehension strategies. This course should only be selected based recommendation from the principal.

**(ENG1L) English, Grade 9, Essential** This course provides foundational literacy and communication skills to prepare students for success in their daily lives, in the workplace, and in the Grade 10 LDCC Course. The course is organized into strands that develop listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on developing foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students develop strategies and put into practice the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas.

**(ENL1W)** English, Grade 9, De-streamed This course enables students to continue to develop and consolidate the foundational knowledge and skills that they need for reading, writing, and oral and visual communication. Throughout the course, students will continue to enhance their media literacy and critical literacy skills, and to develop and apply transferable skills, including digital literacy. Students will also make connections to their lived experiences and to society and increase their understanding of the importance of language and literacy across the curriculum.

**(FIF 1D) French Immersion, Grade 9, Academic** This course enables students to enhance their knowledge of the French language and to further develop their language skills through the study of 20th century North American francophone literature and culture. Students will participate in oral communication, reading and writing activities as they study an authentic novel and selected authentic poems, legends, songs, films and newspaper articles from French speaking parts of North America. Prerequisite: Minimum of 3,800 hours of French instruction or equivalent.

**(FSF1D) Core French, Grade 9, Academic** This course provides opportunities for students to communicate and interact in French with increasing independence, with a focus on familiar topics related to their daily lives. Students will develop their skills in listening, speaking, reading, and writing by using language learning strategies introduced in the elementary Core French program, and will apply creative and critical thinking skills in various ways. They will

also enhance their understanding and appreciation of diverse French-speaking communities and will develop skills necessary for lifelong language learning.

(MAT 1L) Mathematics, Grade 9, Essential This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the Grade 10 LDCC course. The course is organized in three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on developing and consolidating key foundational mathematical concepts and skills by solving authentic, everyday problems.

(MTH1W) Mathematics, Grade 9, De-streamed This course enables students to consolidate, and continue to develop, an understanding of mathematical concepts related to number sense and operations, algebra, measurement, geometry, data, probability, and financial literacy. Students will use mathematical processes, mathematical modelling, and coding to make sense of the mathematics they are learning and to apply their understanding to culturally responsive and relevant real-world situations. Students will continue to enhance their mathematical reasoning skills, including proportional reasoning, spatial reasoning, and algebraic reasoning, as they solve problems and communicate their thinking.

(NAC10) Exploring Art, Grade 9, Open This course examines the arts that are offered at RHS with a focus on indigenous culture in Canada and around the world. Students will have the opportunity to create, present, and analyse art works, including integrated art works/ productions, that explore or reflect First Nations, Métis, and Inuit perspectives and cultures. Students will select between courses focused in either Drama, Visual Arts or Music.

**(PPL10) Healthy Active Living Education, Grade 9, Open** This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students will learn movement skills and principles, ways to improve personal fitness and physical competence, and safety and injury prevention. They will investigate issues related to healthy sexuality and the use and abuse of alcohol, tobacco, and other drugs and will participate in activities designed to develop goal-setting, communication and social skills.

**(SNC1L) Science, Grade 9, Essential** This course enables students to develop a deeper understanding of concepts in chemistry, physics, biology, and Earth and space science. Additionally, this course enables students to further develop their practical skills in scientific investigations and to apply their understanding of science in real-world situations.

**(SNC1W) Science, Grade 9, De-streamed** This course enables students to develop their understanding of concepts related to biology, chemistry, physics, and Earth and space science, and to relate science to technology, society, and the environment. Throughout the course, students will develop and refine their STEM skills as they use scientific research, scientific experimentation, and engineering design processes to investigate concepts and apply their knowledge in situations that are relevant to their lives and communities. Students will continue to develop transferable skills as they become scientifically literate global citizens.

(TAS1O) Technology and the Skilled Trades, Grade 9, Open This hands-on course enables students to further explore the engineering design process and develop other technological knowledge and skills introduced in earlier grades. Students will design and safely create prototypes, products, and/or services, working with tools and technologies from various industries. As students develop their projects to address real-life problems, they will apply technological concepts such as precision measurement, as well as health and safety standards. Students will begin to explore job skills programs and education and training pathways, including skilled trades, that can lead to a variety of careers.

## **GRADE 10 PROGRAM**

We strongly encourage parents and students to consider their options carefully and consult with teachers and guidance counsellors before making a final decision. Teachers have very good insight as to which level would be appropriate.

Most grade 10 courses are compulsory credits for the Ontario Secondary School Diploma. Students in Grade 10 take 8 credit courses. Students require 30 credits to graduate with an Ontario Secondary School Diploma.

Choices should be based on a student's current level of achievement, teacher recommendation, and pathway planning.

#### What is the difference between Academic, Applied and Essentials courses?

#### Academic

- Lead to University, University/College or College courses in Grade 11 and 12
- Students should demonstrate the ability to work independently
- Focus on critical thinking skills and analyzing concepts

#### **Applied**

- Lead to College and University/College courses in Grade 11 and 12
- More opportunity for in-class practice
- Focus on practical applications and concrete ideas

#### **Essentials**

- Lead to Workplace courses in Grade 11 and 12
- Use many hands-on activities and in-class practice
- Focus on concrete ideas and building essential skills

#### Can I take a combination of Academic, Applied and Locally Developed courses?

Yes. For each subject you should consider your strengths and skills. For example, you can do math and science at one level and English or geography at another based on your abilities in each subject.

#### If I choose Applied or Locally Developed courses does that stop any chances of going to university?

- Students require ENG4U (grade 12 University English) to enter university directly from high school. The path to this course starts with ENG2D (grade 10 Academic English).
- However, you do not need Academic math or Academic science to get into all university programs (for example: English, Law, History).
- Colleges and universities have articulation agreements that grant credits and admission into a related university program after completion of many 2- or 3-year college diplomas.



# **Grade 10 Course Selection Planning Form**

This form is for planning purposes only. All selections will be made by students in their MyBlueprint accounts. Course descriptions can be found on the following pages.



Course	Description	Course Code	<b>_</b>
Compulsory (req	uired)		
English	Academic	ENG2D	
	Applied	ENG2P	
	Essentials	ENG2L	
Mathematics	Academic	MPM2D	
	Applied	MFM2P	
	Essentials	MAT2L	
Science	Academic	SNC2D	
	Applied	SNC2P	
	Essentials	SNC2L	
History	Academic	CHC2D	
	Applied	CHC2P	
	Histoire – French Immersion	CHC2DF	
Civics and Careers	Civics and Career Studies (0.5 credit each)	CHV2O/ GLC2O	
	Éducation à la citoyenneté / Exploration	CHV2OF/ GLC2OF	
	des choix de carrière – French Immersion		
French	French Immersion (only compulsory for	FIF2D	
	the French Immersion Certificate)		
Electives			
Students will <b>choose</b>	Music	AMU2O	
3 courses as	Visual Arts	AVI2O	
electives.	Launching and Leading a Business	BEP2O	
	Core French	FSF2D	
Alternate choices are	Healthy Active Living	PPL2O	
to be indicated	Food and Nutrition	HFN2O	
below.	Communication Technology	TGJ2O	
	Construction Technology	TCJ2O	
	Transportation Technology	TTJ2O	
Elective grade 11	Theatre Production	ADD3M	
courses available to	Anthropology, Psychology and Sociology	HSP3U	
grade 10 students	Raising Healthy Children (Parenting)	HPC3O	
	Personal Fitness	PAF3O	
	Photography and Digital Imaging	TGP3M	
French Immersion	Healthy Active Living (French)	PPL2OF	
	Total		

Grade 10 alternative electives:	and	

# **GRADE 10 COURSE DESCRIPTIONS**

(ADD3M) Theatre Production, Grade 11, University/College The focus of this course will be the production of a full-scale dramatic performance. This will provide students with the opportunity to communicate their ideas through dramatic performance for various audiences. This course emphasizes the acquisition and application of knowledge and skills related to production, creation and interpretation of works involving dance, media music and/or visual arts.

(AMU2O) Music, Grade 10, Open This course emphasizes the creation and performance of music and does not require the student to have previous music experience. Students will develop musical literacy skills and develop their understanding of musical conventions, practices, and terminology. They will apply the elements of music in a range of activities, including playing a musical instrument. They will also explore the function of music in society with reference to the self, communities, and cultures. The music department at RHS has a selection of musical instruments to be used by students during this course. Prerequisite: None

(AVI2O) Visual Arts, Grade 10, Open This course enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials, and processes for artistic exploration and experimentation. Projects in this class might include painting, drawing, pottery and mixed media. Students will apply the elements and principles of design when exploring the creative process. Students will use the critical analysis process to reflect on and interpret art within a personal, contemporary, and historical context. Prerequisite: None

(BEP2O) Launching and Leading a Business, Grade 10, Open This course introduces students to the world of business and what is required to be successful, ethical, and responsible in today's economy. Students will develop the knowledge and skills needed to be an entrepreneur who knows how to respond to local and global market opportunities. Throughout the course, students will explore and understand the responsibility of managing different functions of a business. This includes accounting, marketing, information and communication technology, financial management, human resources, and production.

(CHC2D) Canadian History Since World War I, Grade 10 Academic This course explores social, economic, and political developments and events and their impact on the lives of different individuals, groups, and communities, including First Nations, Métis, and Inuit individuals and communities, in Canada since 1914. Students will examine the role of conflict and cooperation in Canadian society, Canada's evolving role within the global community, and the impact of various individuals, organizations, and events on identities, citizenship, and heritage in Canada. Students will develop an understanding of some of the political developments and government policies that have had a lasting impact on First Nations, Métis, and Inuit individuals and communities. They will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating key issues and events in Canadian history since 1914.

(CHC2P) Canadian History Since World War I, Grade 10 Applied This course focuses on the social context of historical developments and events and how they have affected the lives of people in Canada, including First Nations, Métis, and Inuit individuals and communities, since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to heritage and identities in Canada. Students will develop an understanding of some key political developments and government policies that have had an impact on First Nations, Métis, and Inuit individuals and communities. They will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating the continuing relevance of historical developments and how they have helped shape communities in present-day Canada.

**(CHV20) Civics, Grade 10, Open** This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy in local, national, and global contexts, about political reactions to social change, and about political decision-making processes in Canada. They will explore their own and others' ideas about civics questions and learn how to think critically about public issues and react responsibly to them. Prerequisite: None \*\*NOTE: this course is taken in conjunction with GLC2O.

**(ENG2D) English, Grade 10, Academic** This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 1I university or college preparation course. Prerequisite: English, Grade 9, Academic or Applied

**(ENG2L) English, Grade 10, Essential** In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace, and in the English Grade 11 Workplace Preparation course. The course is organized into strands that extend listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on refining foundational literacy skills and on using language clearly and accurately in a variety of authentic contexts. Students build on their strategies and engage in the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas. Prerequisite: A Grade 9 English credit

**(ENG2P) English, Grade 10, Applied** This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in secondary school and daily life. Students will study and create a variety of informational, literary, and graphic texts. An important focus will be on the consolidation of strategies and processes that help students interpret texts and communicate clearly and effectively. This course is intended to prepare students for the compulsory Grade 11 college or workplace preparation course. Prerequisite: English, Grade 9, Academic or Applied

**(FIF2D)** French Immersion, Grade 10, Academic This course enables students to increase their knowledge of the French language and to further develop their language skills through the study of 20th century European francophone literature and culture. Students will participate in oral communication, reading and writing activities based on a variety of French literary and media works. They will study at least one novel and a selection of poems, short stories, films, plays, and newspaper and magazine articles. Prerequisite: French Immersion, Grade 9, Academic

**(FSF2D) Core French, Grade 10, Academic** This course enables students to increase their knowledge of the French language, further develop their language skills, and deepen their understanding and appreciation of francophone culture around the world. Exploring a variety of themes, students will develop and apply critical thinking skills in discussion, in their analysis and interpretation of texts, and in their own writing. Prerequisite: Core French, Grade 9, Academic or Applied

(GLC2O) Career Studies, Grade 10, Open This course teaches students how to develop and achieve personal goals in education and work and contribute to their communities. Student learning will include assessing their own knowledge, skills, and characteristics and investigating economic trends, workplace organization, work opportunities and ways to search for work. The course explores post-secondary learning options, prepares students for community-based learning and helps them build the capabilities needed for managing work and life transitions. Students will design action plans for pursuing their goals. Prerequisite: None Note: This course is taken in conjunction with CHV2O.

**(HFN2O) Food and Nutrition, Grade 10, Open** This course explores the factors that affect attitudes and decisions about food, examines current issues of body image, food marketing and the study of nutrition. Students will learn how to make informed food choices, how to prepare foods and will investigate Canadian food heritage and food industries, as well as global food issues. Students at RHS will prepare and cook food in the kitchen once a week. Prerequisite: None

(HPC3O) Raising Healthy Children, Grade 11, Open This course focuses on the skills and knowledge parents, guardians, and caregivers need, with particular emphasis on maternal health, pregnancy, birth, and the early years of human development (birth to six years old). Through study and practical experience, you will learn how to meet the developmental needs of young children, communicate with them, and effectively guide their early behaviour. You will develop your research skills through investigations related to caregiving and child rearing. *Prerequisite: None* 

(HSP3U) Introduction to Anthropology, Psychology, & Sociology, Grade 11, University This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines. *Prerequisite: ENG2D or CHC2D* 

(HSP3C) Introduction to Anthropology, Psychology, & Sociology, Grade 11, College This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. They will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines. *Prerequisite: None* 

(MPM2D) Principles of Mathematics, Grade 10, Academic This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems. Prerequisite: Mathematics, Grade 9, Academic or Applied + Transfer

(MFM2P) Foundations of Mathematics, Grade 10, Applied This course enables students to consolidate their understanding of linear relations and extend their problem solving and algebraic skills through investigation, the effective use of technology, and hands-on activities. Students will develop and graph equations in analytic geometry; solve and apply linear systems, using real-life examples; and explore and interpret graphs of quadratic relations. Students will investigate similar triangles, the trigonometry of right triangles, and the measurement of three-dimensional figures. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. Prerequisite: Mathematics, Grade 9, Academic or Applied

(MAT2L) Mathematics, Grade 10, Essential This course emphasizes the extension of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the Grade 11 Mathematics Workplace Preparation course. The course is organized in three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing and oral language through relevant and practical math activities. Prerequisite: A Grade 9 Mathematics credit

(PAF3O) Healthy Living and Personal and Fitness Activities, Grade 11, Open This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities focus on personal fitness. Students will be encouraged to develop personal competence in a variety of movement with a skills and will be given opportunities to practice goal-setting, decision-making, social, and interpersonal skills. Students will also study the components of training principle, nutrition, food management, and sport injuries. Prerequisite: None

**(PPL20) Healthy Active Living Education, Grade 10, Open** This course, often called **Physical Education**, emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Student will participate in a variety of activities that enhance personal competence, fitness, and health. These will include a variety of group sports and individual activities. As part of the health components of the course they will examine issues related to healthy sexuality, healthy eating, substance use and abuse, and the use of informed decision-making, conflict resolution and social skills in making personal choices. At RHS, students will be outdoors if the weather permits or may use the weight room or gymnasium during class. Prerequisite: None

(SNC2D) Science, Grade 10, Academic This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid—base reactions; forces that affect climate and climate change; and the interaction of light and matter. Prerequisite: Science, Grade 9, Academic or Applied

**(SNC2L) Science, Grade 10, Essential** This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the environmental impact of science and technology, to prepare students for success in everyday life, in the workplace, and in the Science Grade 11 Workplace Preparation course. Students explore a range of topics, including science in the media, interactions of common materials, interdependence of organisms in communities, and using electrical energy. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities. Prerequisite: None

**(SNC2P) Science, Grade 10, Applied** This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science in real world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter. Prerequisite: Science, Grade 9, Academic or Applied

(TCJ2O) Construction Technology, Grade 10, Open This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop an awareness of environmental and societal issues related to construction technology, and will explore secondary and postsecondary pathways leading to careers in the industry. Prerequisite: None

(TGJ2O) Communications Technology, Grade 10, Open This course introduces students to communications technology from a media perspective. Students will work in the areas of video and audio production, print and graphic communications, photography, and animation. Student projects may include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing web pages. Students will also develop an awareness of environmental and societal issues related to communications technology and explore secondary and postsecondary education and career opportunities in the various communications technology fields. Prerequisite: None

(TGP3M) Communications Technology: Photography, Grade 11, University/College This course examines communications technology from a photography perspective. Students will develop knowledge and skills as they plan and produce photographs with digital cameras. Students will be introduced to exposure settings on DSLR cameras, and composition techniques consistent with photographic images. While incorporating the principles and elements of design students will also explore the digital art of Photoshop and GIMP; editing images and manipulating perspective. Prerequisite: None

(TTJ2O) Transportation Technology, Grade 10, Open This course, often referred to as Auto Shop, introduces students to the service and maintenance of vehicles, aircraft, and/or watercraft. Students will develop knowledge and skills related to the construction and operation of vehicle/craft systems and learn maintenance and repair techniques. Student projects may include the construction of a self-propelled vehicle or craft, engine service, tire/wheel service, electrical/battery service, and proper body care. Students at RHS must also be able to complete important safety tests before being able to use the tools and machinery Prerequisite: None

# **GRADE 11 AND 12 PROGRAM**

# **Prerequisite Courses for Post-Secondary Pathways**

<u>University Pathway</u>: All Ontario University programs require at least **six 4U or 4M level courses**, including grade 12 English (**ENG4U**). There may be additional prerequisites depending on the program.

<u>College Pathway</u>: All Ontario College programs require grade 12 English (**ENG4C**). There may be additional prerequisites depending on the program.

<u>Apprenticeship Pathway</u>: Grade 12 English (ENG4C) and Math (MAP4C) are strongly recommended for many apprenticeship pathways.

See below for a list of grade 11 and 12 course descriptions.

A course planning sheet for grades 11 and 12 can be found on page 30.

# **COURSE DESCRIPTIONS**

\*\*NOTE: Some courses described below may not be offered every year. See the course planning sheet or your MyBlueprint account for specific offerings.

Arts

**Business Studies** 

Canadian & World Studies

**Cooperative Education** 

English

French

Health and Physical Education

Interdisciplinary Studies

**Mathematics** 

Science

Social Science and the Humanities

**Technological Studies** 

Online Offerings

#### Arts

(ADA3O) Drama, Grade 11, Open This course requires students to engage in dramatic processes and the presentation of dramatic works, and emphasizes the application of drama skills in other contexts and opportunities. Students will interpret and present works in a variety of dramatic forms, create and script original works, and critically analyse the processes involved in producing dramatic works. *Prerequisite: None* 

(ADA4M) Drama, Grade 12, University/College This course requires students to experiment individually and collaboratively with forms and conventions of both drama and theatre from various cultures and time periods. Students will interpret dramatic literature and other text and media sources while learning about various theories of directing and acting. *Prerequisite: ADA30* 

(ADD3M) Theatre Production, Grade 11, University/College The focus of this course will be the production of a full-scale dramatic performance. This will provide students with the opportunity to communicate their ideas through dramatic performance for various audiences. This course emphasizes the acquisition and application of knowledge and skills related to production, creation and interpretation of works involving dance, media music and/or visual arts. *Prerequisite: Drama, Grade 9 or10* 

(ADD4M) Theatre Production Grade 12, University/College The focus of this course will be the production of a full-scale dramatic performance. This will provide students with the opportunity to communicate their ideas through dramatic performance for various audiences. This course emphasizes the acquisition and application of knowledge and skills related to production, creation and interpretation of works involving dance, media music and/or visual arts. *Prerequisite:* ADA3O

(AMU3O) Music, Grade 11, Open This course continues the skills of musical performance through playing a band instrument. It provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analysing live and recorded performances. *Prerequisite: Music, Grade 9 or 10* 

(AMU4M) Music, Grade 12, University/College This course enables students to enhance their musical literacy through the creation, appreciation, analysis, and performance of music. Students will perform traditional, commercial, and art music, and will respond with insight to live and recorded performances. Students will enhance their understanding of the function of music in society and the impact of music on themselves and various communities and cultures. *Prerequisite: AMU3O* 

(ASM3M) Media Arts, Grade 11, University/College This course focuses on the development of media arts skills through the production of art works involving traditional and emerging technologies, tools, and techniques such as new media, computer animation, and web environments. Students will explore the evolution of media arts as an extension of traditional art forms, use the creative process to produce effective media art works, and critically analyse the unique characteristics of this art form. Students will examine the role of media artists in shaping audience perceptions of identity, culture, and values.

(ASM4M) Media Arts, Grade 12, University/College This course emphasizes the refinement of media arts skills through the creation of a thematic body of work by applying traditional and emerging technologies, tools, and techniques such as multimedia, computer animation, installation art, and performance art. Students will develop works that express their views on contemporary issues and will create portfolios suitable for use in either career or postsecondary education applications. Students will critically analyse the role of media artists in shaping audience perceptions of identity, culture, and community values. *Prerequisite: any senior Visual Art course.* 

(AVI3O) Visual Arts, Grade 11, Open This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage. Students will use the critical analysis process when evaluating their own work and the work of others. *Prerequisite: None* 

**(AVI4M) Visual Arts, Grade 12, University/College** This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. *Prerequisite: AVI3O* 

#### **Business Studies**

(BBB4M) International Business Fundamentals, Grade 12, University/College This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business. This course prepares students for postsecondary programs in business, including international business, marketing, and management. *Prerequisite: NBE3C or NBE3U* 

**(BMI3C)** Marketing, Grade 11, College This course introduces the fundamental concepts of product marketing, which includes the marketing of goods, services, and events. Students will examine how trends, issues, global economic changes, and information technology influence consumer buying habits. Students will engage in marketing research, develop marketing strategies, and produce a marketing plan for a product of their choice. *Prerequisite: None* 

(BOH4M) Business Leadership: Management Fundamentals, Grade 12, University/College This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business. This course prepares students for postsecondary programs in business, including international business, marketing, and management. *Prerequisite: NBE3C or NBE3U* 

### Canadian & World Studies

(CGF3M) Forces of Nature: Physical Processes and Disasters In this course, students will explore physical processes related to the earth's water, land, and air. They will investigate how these processes shape the planet's natural characteristics and affect human systems, how they are involved in the creation of natural disasters, and how they influence the impacts of human disasters. Throughout the course, students will apply the concepts of geographic thinking and the geographic inquiry process and use spatial technologies to analyse these processes, make predictions related to natural disasters, and assess ways of responding to them. *Prerequisite: Issues in Canadian Geography, Grade 9, Academic or Applied* 

(CLU3M) Understanding Canadian Law, Grade 11, University/College This course explores Canadian law, with a focus on legal issues that are relevant to the lives of people in Canada. Students will gain an understanding of laws relating to rights and freedoms in Canada; our legal system; and family, contract, employment, tort, and criminal law. Students will develop legal reasoning skills and will apply the concepts of legal thinking and the legal studies inquiry process when investigating a range of legal issues and formulating and communicating informed opinions about them. *Prerequisite:* Canadian History since World War I, Grade 10, Academic or Applied

(CLN4U) Canadian and International Law, Grade 12, University This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and

other issues in both Canadian and international contexts. *Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities.* 

**(CLN4C)** Legal Studies, Grade 12, College This course provides a foundation for students who wish to pursue a career that requires an understanding of law. Students will explore the importance of law, analysing contemporary legal issues and their relevance to daily life. They will investigate the requirements for various law-related careers as well as legal responsibilities in the workplace. Students will apply the concepts of legal thinking and the legal studies inquiry process to investigate their rights and responsibilities, legal processes and structures, and the role of law in a changing society. *Prerequisite: Civics and Citizenship, Grade 10, Open* 

## Cooperative Education

(COOP32) Cooperative Education, 2 credits, Open This course allows students to explore a career option by working in a real workplace for half of the day. It allows students to test out a job and gain experience in a field they are interested in pursuing in the future. The Coop teacher will assist in finding placements for students; however, students will also play a role in finding themselves a placement. If students choose 2 credit Coop, the placement must be close enough to the school to return back to school for classes the opposite half of the day.

**(COOP34) Cooperative Education, 4 credits, Open** This course allows students to explore a career option by working in a real workplace **for the full day**. It allows students to test out a job and gain experience in a field they are interested in pursuing in the future. The Coop teacher will assist in finding placements for students; however, students will also play a role in finding themselves a placement. Students will spend the full day and full semester at their chosen workplace.

### English

**(ENG4U) English, Grade 12, University** This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. *Prerequisite: NBE3U* 

**(ENG4C) English, Grade 12, College** This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace. *Prerequisite: NBE3C* 

**(ENG4E) English, Grade 12, Workplace** This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyse informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship. *Prerequisite: NBE3E* 

(NBE3U) Contemporary Aboriginal Voices, Grade 11, University This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Through the analysis of literary texts and media works, students will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also conduct research and analyse the information gathered; write persuasive and literary essays; and analyse the relationship between media forms and audiences. An important focus will be the further development of students' understanding of English-language usage and conventions. *Prerequisite: ENG2D* 

(NBE3C) Contemporary Aboriginal Voices, Grade 11, College This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Aboriginal writers. Students will study the content, form, and style of informational texts and literary and media works, and will develop an appreciation of the wealth and complexity of Aboriginal writing. Students will also write reports, correspondence, and persuasive essays, and analyze the relationship between media forms and audiences. An important focus will be on establishing appropriate voice and using business and technical language with precision and clarity. *Prerequisite: ENGP* 

(NBE3E) Contemporary Aboriginal Voices, Grade 11, Workplace This course emphasizes the development of literacy, critical thinking, and communication skills through the study of works in English by Indigenous writers. Students will study the content, form, and style of informational texts and literary and media works, and will develop an appreciation of the wealth and complexity of Indigenous writing. Students will also write explanations, letters, and reports, and will investigate the connections between media forms and audiences. An important focus will be on using language clearly, accurately, and effectively in a variety of contexts. *Prerequisite: ENG2L* 

#### French

**(FIF3U) French Immersion, Grade 11, University** This course develops knowledge and language skills through the study of francophone literature and culture from around the world. Students will study novels, plays, poems, short stories, films, and non-fiction works and produce written assignments in a variety of forms. The correct use of grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. *Prerequisite: FIF2D* 

**(FIF4U) French Immersion, Grade 12, University** This course provides for extensive study of French literature and culture from the Middle Ages to the present. Students will study novels, plays, poems, films and non-fiction works produced in various historical periods, and will write a formal research paper. The correct use of grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. *Prerequisite: FIF3U* 

# Health & Physical Education

(PAF3O) Healthy Living and Personal and Fitness Activities, Grade 11, Open This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities focus on personal fitness. Students will be encouraged to develop personal competence in a variety of movement with a skills and will be given opportunities to practice goal-setting, decision-making, social, and interpersonal skills. Students will also study the components of training principle, nutrition, food management, and sport injuries. *Prerequisite: None* 

(PAF4O) Healthy Living and Personal and Fitness Activities, Grade 12, Open This course focuses on the development of principles related to training and the impact it can have on individuals with a focus on personal fitness. Students will develop and implement personal physical fitness plans. This course is recommended for any student interested in developing a high level of physical fitness. Students will be exposed to a variety of training methods including weights, running, cycling, core training and circuit training. *Prerequisite: None* 

**(PPL3O) Healthy Active Living Education, Grade 11, Open** This course focuses on the development of a healthy lifestyle and participation in a variety of enjoyable physical activities with a **focus on group sports**. Students will be encouraged to develop personal competence in a variety of movement skills. Students will also study the components of healthy relationships, reproductive health, mental health and personal safety. *Prerequisite: None* 

(PPL4O) Healthy Active Living Education, Grade 12, Open This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities with a focus on group sports. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision-making, conflict resolution and interpersonal skills, with a view to enhance their mental health and their relationships with others. *Prerequisite: None* 

# Interdisciplinary Studies

(IDC4U) Interdisciplinary Studies, Grade 12, Open This course, often called LINK Crew, prepares students to act in a leadership role. Students will design and implement a plan for contributing to their school and/or community; develop skills in communication, interpersonal relations, teamwork and conflict management and apply those skills in leadership and/or peer support roles. Students will apply the principles and processes of inquiry and research and resources to investigate real-life situations and career opportunities in interdisciplinary endeavors. *Prerequisite: None* 

(IDC4O) Interdisciplinary Studies, Grade 12, Open This course, often called LINK Crew, prepares students to act in a leadership role. Students will design and implement a plan for contributing to their school and/or community; develop skills in communication, interpersonal relations, teamwork and conflict management and apply those skills in leadership and/or peer support roles – as a Link Crew Leader. *Prerequisite: None* 

### **Mathematics**

(MAP4C) Foundations for College Mathematics, Grade 12, College This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades. *Prerequisite: MBF3C* 

(MBF3C) Foundations for College Mathematics, Grade 11, College This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations; as well as of measurement and geometry; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; and develop their ability to reason by collecting, analysing, and evaluating data involving one and two variables. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. *Prerequisite: MFM2P* 

(MCR3U) Functions, Grade 11, University This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; and develop facility in simplifying polynomial and rational expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems. *Prerequisite: MPM2D* 

(MCV4U) Calculus and Vectors Grade 12, University This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors, and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, rational, exponential, and sinusoidal functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as physics and engineering. *Prerequisite: MHF4U* 

(MEL4E) Mathematics for Work and Everyday Life, Grade 12, Workplace This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs and create household budgets; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. *Prerequisite: MEL3E* 

(MHF4U) Advanced Functions, Grade 12, University This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students who plan to study mathematics in university and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs. *Prerequisite: MCR3U* 

#### Science

**(SBI3U) Biology, Grade 11, University** This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation. *Prerequisite: SNC2D* 

**(SBI3C) Biology, Grade 11, College** This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields. *Prerequisite: SNC2P* 

**(SBI4U) Biology, Grade 12, University** This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields. *Prerequisite: SBI3U* 

**(SCH3U)** Chemistry, Grade 11, University This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment. *Prerequisite: Science, Grade 10, Academic* 

**(SCH4U)** Chemistry, Grade 12, University This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment. *Prerequisite: Chemistry, Grade 11, University Preparation* 

**(SCH4C)** Chemistry, Grade 12, College This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment. *Prerequisite: Science, Grade 10, Academic or Applied* 

**(SPH3U) Physics, Grade 11, University** This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyse the interrelationships between physics and

technology, and consider the impact of technological applications of physics on society and the environment. *Prerequisite: SNC2D* 

**(SPH4C) Physics, Grade 12, College** This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment. *Prerequisite: SNC2P* 

**(SPH4U) Physics, Grade 12, University** This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyse, qualitatively and quantitatively, data relating to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment. *Prerequisite: SPH3U* 

#### Social Science & the Humanities

**(HFC3M) Food and Culture, Grade 11, University/College** This course focuses on the flavours, aromas, cooking techniques, foods, and cultural traditions of world cuisines. Students will explore the origins of and developments in diverse food traditions demonstrate the ability to cook with ingredients and equipment from a variety of cultures. *Prerequisite: None* 

(HIP4O) Personal Life Management, Grade 12, Open This course, often called Adulting, focuses on preparing students for living independently and working successfully with others. Students will learn a variety of important silks they will need to become independent. These might include making a budget, making plans for the future, making decisions, cooking healthy meals on a budget, basic home and car maintenance skills, etc. *Prerequisite: None* 

(HPC3O) Raising Healthy Children, Grade 11, Open This course focuses on the skills and knowledge parents, guardians, and caregivers need, with particular emphasis on maternal health, pregnancy, birth, and the early years of human development (birth to six years old). Through study and practical experience, you will learn how to meet the developmental needs of young children, communicate with them, and effectively guide their early behaviour. You will develop your research skills through investigations related to caregiving and child rearing. *Prerequisite: None* 

(HSB4U) Challenge & Change in Society, Grade 12, University This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will critically analyse how and why cultural, social, and behavioural patterns change over time. They will explore the ideas of social theorists and use those ideas to analyse causes of and responses to challenges such as technological change, deviance, and global inequalities. Students will explore ways in which social science research methods can be used to study social change. *Prerequisite: NBE3U* 

(HSP3U) Introduction to Anthropology, Psychology, & Sociology, Grade 11, University This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines. *Prerequisite: ENG2D or CHC2D* 

**(HSP3C)** Introduction to Anthropology, Psychology, & Sociology, Grade 11, College This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. They will be given opportunities to apply theories from a variety of

perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines. *Prerequisite: None* 

# **Technological Studies**

**(TCJ3C)** Construction Engineering Technology, Grade 11, College This course, often called Wood Shop, focuses on the development of knowledge and skills related to wood working and construction. Students will gain hands on experience using a variety of materials, processes, tools, and equipment; learn about building design and planning projects; create and interpret working drawings and sections. *Prerequisite: None* 

**(TCJ4C)** Construction Engineering Technology, Grade 12, College This course, often called Wood Shop, enables students to further develop knowledge and skills related to wood working and construction. Students will gain hands on experience using a variety of materials, processes, tools, and equipment and will learn more about building design and project planning. *Prerequisite: TCJ3C* 

(TGJ3M) Communications Technology, Grade 11, University/College This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; and interactive new media *Prerequisite: None* 

(TGJ4M) Communications Technology, Grade 12, University/College This course enables students to further develop media knowledge and skills while designing and producing projects in the areas of live, recorded, and graphic communications. Students may work in the areas of TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also expand their awareness of environmental and societal issues related to communications technology and will investigate career opportunities and challenges in a rapidly changing technological environment. *Prerequisite: TGJ3M* 

(TGG3M) Communications Technology: Print and Graphics Communication, Grade 11, University/College This course, often called Yearbook, examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of graphic communications. These areas may include video, and movie production; audio production; print and graphic communications; photography; digital imaging; and interactive new media. The culminating activity will result in contributing to the production of the school yearbook. *Prerequisite: None* 

(TGG4M) Communications Technology: Print and Graphics Communication, Grade 12, University/College This course, often called Yearbook, emphasizes the development of the knowledge and skills required for the production of media arts works i.e.. Photography art. Students will create media art works using a variety of technologies (ie. computer graphics digital camera, photo-imaging software, and digital video production techniques). The culminating activity will result in contributing to the production of the school yearbook. *Prerequisite: TGG3M* 

(TGP3M) Communications Technology: Photography, Grade 11, University/College This course examines communications technology from a photography perspective. Students will develop knowledge and skills as they plan and produce photographs with digital cameras. Students will be introduced to exposure settings on DSLR cameras, and composition techniques consistent with photographic images. While incorporating the principles and elements of design students will also explore the digital art of Photoshop and GIMP; editing images and manipulating perspective. *Prerequisite: None* 

(TGP4M) Communications Technology: Photography, Grade 12, University/College This course further develops the student's skills in communications technology from a photography perspective. Students will progress their knowledge and skills as they plan and produce photographs with digital cameras. Students will work with DSLR cameras to refine their use of settings and composition techniques. While incorporating the principles and elements of design students

will also explore the digital art of Photoshop and GIMP; editing images and manipulating perspective. *Prerequisite: TGP3M* 

(TTJ3C) Transportation Technology, Grade 11, College This course, often called Auto Shop, enables students to develop technical knowledge and skills as they study, test, service, and repair engine, electrical, suspension, brake, and steering systems on vehicles, aircraft, and/or watercraft. *Prerequisite: None* 

(TTJ3O) Transportation Technology: Vehicle Ownership, Grade 11, Open This course, often called Auto Shop, enables students to become familiar with the options and features of various vehicles, issues of registration, and the legal requirements affecting vehicle owners. Students will also learn about vehicle financing and insurance, vehicle maintenance, emergency procedures, and the responsibilities of being a vehicle owner. *Prerequisite: None* 

(TTJ4C) Transportation Technology, Grade 12, College This course, often called Auto Shop, enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; power trains; steering/control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment *Prerequisite: TTJ3C* 



# GRADE 11 AND 12 COURSE SELECTION PLANNING FORM



This form is for planning purposes only. All selections will be made by students in their MyBlueprint accounts.

Grade 12 courses marked with an asterix (\*) are offered in **alternating years**; check with guidance to see if the course will be offered in your grade 11 or 12 year.

Course	Description	Course Code	<b>V</b>
Arts	Theatre Production, Grade 11, University/College	ADD3MO	
	Theatre Production, Grade 12, University/College	ADD4MO	
	Music, Grade 11, Open	AMU300	
	Music, Grade 12, University/College	AMU4MO	
	Media Arts, Grade 11, University/College	ASM3M	
	Media Arts, Grade 12, University/College	ASM4M	
	Visual Arts, Grade 11, Open	AVI3OO	
	Visual Arts, Grade 12, University/College	AVI4MO	
Business Studies	Business: Marketing, Grade 11, College	BMI3C	
	Business Leadership: Management Fundamentals, Grade 12, University/College	вон4мо	
Canadian &	Forces of Nature: Physical Processes and Disasters, Grade 11, University/College	CGF3M	
<b>World Studies</b>	Understanding Canadian Law, Grade 11, University/College	CLU3M	
	Canadian and International Law, Grade 12, University	CLN4U	
Cooperative	Cooperative Education, 2 credits, Open	COOP32	
Education	Cooperative Education, 4 credits, Open	COOP34	
English	English: Contemporary Aboriginal Voices, Grade 11, University	NBE3UO	
_	English: Contemporary Aboriginal Voices, Grade 11, College	NBE3CO	
** compulsory	English: Contemporary Aboriginal Voices, Grade 11, Workplace	NBE3EO	
for grade 11 and	English, Grade 12, University	ENG4UO	
12	English, Grade 12, College	ENG4CO	
	English, Grade 12, Workplace	ENG4EO	
French	French Immersion, Grade 11, University	FIF3UO	
	French Immersion, Grade 12, University	FIF4UO	

Health and	Healthy Active Living Education, Grade 11, Open	PPL3OO
Physical	Healthy Active Living Education, Grade 11, Open, French Immersion	PPL3OF
Education	Healthy Active Living Education, Grade 12, Open	PPL4OO
	Healthy Active Living Education, Grade 12, Open, French Immersion	PPL4OF
	Healthy Living and Personal and Fitness Activities, Grade 11, Open	PAF300
	Healthy Living and Personal and Fitness Activities, Grade 12, Open	PAF4OO
Interdisciplinary	Interdisciplinary Studies: Link Crew, Grade 12, University	IDC4UO
Studies	Interdisciplinary Studies: Link Crew, Grade 12, Open	IDC400
	Interdisciplinary Studies: Link Crew, Grade 12, University, French Immersion	IDC4UF
Mathematics	Functions, Grade 11, University	MCR3UO
	Foundations for College Mathematics, Grade 11, College	MBF3CO
**compulsory	Mathematics for Work and Everyday Life, Grade 11, Workplace	MEL3EO
for grade 11	Advanced Functions, Grade 12, University	MHF4UO
	Calculus and Vectors, Grade 12, University	MCV4UO
	Foundations for College Mathematics, Grade 12, College	MAP4CO
	Mathematics for Work and Everyday Life, Grade 12, Workplace	MEL4EO
Science	Biology, Grade 11, University	SBI3UO
	Biology, Grade 11, College	SBI3CO
	Biology, Grade 12, University	SBI4UO
	Chemistry, Grade 11, University	SCH3UO
	Chemistry, Grade 12, University*	SCH4UO
	Chemistry, Grade 12, College*	SCH4CO
Social Science	Food and Culture, Grade 11, University/College	HFC3MO
and the	Raising Healthy Children (Parenting), Grade 11, Open	HPC3OO
Humanities	Personal Life Management (Adulting), Grade 12, Open	HIP4OO
	Intro to Anthropology, Psychology and Sociology, Grade 11, University	HSP3UO
	Intro to Anthropology, Psychology and Sociology, Grade 11, College	HSP3CO
	Challenge and Change in Society, Grade 12, University	HSB4UO
Technological	Communications Technology, Grade 11, University/College	TGJ3MO
Studies	Communications Technology, Grade 12, University/College	TGJ4MO
	Communications Technology: Print and Graphic Communication (Yearbook), Grade 11, University/College	TGG3MO
	Communications Technology: Print and Graphic Communication (Yearbook), Grade 12, University/College	TGG4MO
	Communications Technology: Photography and Digital Imaging, Grade 11, University/College	TGP3MO
	Communications Technology: Photography and Digital Imaging, Grade 12, University/College	TGP4MO
	Construction Engineering Technology, Grade 11, College Preparation	TCJ3MO
	Construction Engineering Technology, Grade 12, College Preparation	TCJ4MO
	Construction Engineering Technology, Grade 12, College Preparation Transportation Technology, Grade 11, College	TCJ4MO TTJ3CO

We do our best to schedule students into their first choices; students must also select 2 <u>alternate</u> choices in case there is a scheduling conflict.

Grade 11 alternative electives:	and	
Grade 12 alternative electives:	and	

# **ONLINE COURSE OFFERINGS**

	-		g - Proposed Courses with Descript bject to change based on student r	
AVI3M	11	Arts	Visual Arts	This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. The course may be delivered as a comprehensive program or through a program focused on a particular art form (e.g., photography, video, computer graphics, information design). Prerequisite: Visual Arts, Grade 9 or 10, Open
AWR4M	12	Arts	Film Studies	Love movies? This course is an introduction to the art, history, and analysis of film. Students will learn about the technical, aesthetic, and cultural elements of modern films, and will develop the skills necessary to analyze and interpret films. The course will cover a range of film movements, styles, and genres, and will consider the ways in which films reflect and shape the societies in which they are produced.
BAF3M	11	Business	Financial Accounting Fundamentals	This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and ethics and current issues in accounting. Prerequisite: None
BBB4M	12	Business	International Business Fundamentals	This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business effectively. This course prepares students for postsecondary programs in business, including international business, marketing, and management. Prerequisite: None
BDI3C	11	Business	Entrepreneurship: The Venture	This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a school-based or student-run business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills most often associated with successful entrepreneurs. Prerequisite: None
BOH4M	12	Business	Business Leadership: Management Fundamentals	This course focuses on the development of leadership skills used in managing a successful business. Students will analyse the role of a leader in business, with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees, and planning. Effective business communication skills, ethics, and social responsibility are also emphasized. Prerequisite: None
CGF3M	11	Geography	Forces of Nature: Physical Processes and Disasters	In this course, students will explore physical processes related to the earth's water, land, and air. They will investigate how these processes shape the planet's natural characteristics and affect human systems, how they are involved in the creation of natural disasters, and how they influence the impacts of human disasters. Throughout the course, students will apply the concepts of geographic thinking and the geographic inquiry process and use spatial technologies to analyse these processes, make predictions related to natural disasters, and assess ways of responding to them. Prerequisite: Issues in Canadian Geography, Grade 9, Academic or Applied
CGF3MF	11	Geography	French Immersion - Forces of Nature: Physical Processes and Disasters	In this course, students will explore physical processes related to the earth's water, land, and air. They will investigate how these processes shape the planet's natural characteristics and affect human systems, how they are involved in the creation of natural disasters, and how they influence the impacts of human disasters. Throughout the course, students will apply the concepts of geographic thinking and the geographic inquiry process and use spatial technologies to analyse these processes, make predictions related to natural disasters, and assess ways of responding to them. Prerequisite: Issues in

				Canadian Geography, Grade 9, Academic or Applied
CGG3O	11	Geography	Travel and Tourism: A Geographic Perspective	This course focuses on issues related to travel and tourism within and between various regions of the world. Students will investigate unique environmental, sociocultural, economic, and political characteristics of selected world regions. They will explore travel patterns and trends, as well as tensions related to tourism, and will predict future tourism destinations. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate the impact of the travel industry on natural environments and human communities. Prerequisite: Issues in Canadian Geography, Grade 9, Academic or Applied
CGR4M	12	Geography	The Environment and Resource Management	This course investigates interactions between natural and human systems, with a particular emphasis on the impacts of human activity on ecosystems and natural processes. Students will use the geographic inquiry process, apply the concepts of geographic thinking, and employ a variety of spatial skills and technologies to analyse these impacts and propose ways of reducing them. In the course of their investigations, they will assess resource management and sustainability practices, as well as related government policies and international accords. They will also consider questions of individual responsibility and environmental stewardship as they explore ways of developing a more sustainable relationship with the environment.  Prerequisite: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities
CGW4U	12	Geography	World Issues: A Geographic Analysis	In this course, students will address the challenge of creating a more sustainable and equitable world. They will explore issues involving a wide range of topics, including economic disparities, threats to the environment, globalization, human rights, and quality of life, and will analyse government policies, international agreements, and individual responsibilities relating to them. Students will apply the concepts of geographic thinking and the geographic inquiry process, including the use of spatial technologies, to investigate these complex issues and their impacts on natural and human communities around the world. Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
GLC2OF	10	Guidance and Career Education	French Immersion - Career Studies	This course gives students the opportunity to develop the skills, knowledge, and habits that will support them in their education and career/life planning. Students will learn about global work trends, and seek opportunities within the school and community to expand and strengthen their transferable skills and their ability to adapt to the changing world of work. On the basis of exploration, reflective practice, and decision-making processes, students will make connections between their skills, interests, and values and their postsecondary options, whether in apprenticeship training, college, community living, university, or the workplace. They will set goals and create a plan for their first postsecondary year. As part of their preparation for the future, they will learn about personal financial management – including the variety of saving and borrowing tools available to them and how to use them to their advantage – and develop a budget for their first year after secondary school. Prerequisite: None
GLC2O	10	Guidance and Career Education	Career Studies	This course gives students the opportunity to develop the skills, knowledge, and habits that will support them in their education and career/life planning. Students will learn about global work trends, and seek opportunities within the school and community to expand and strengthen their transferable skills and their ability to adapt to the changing world of work. On the basis of exploration, reflective practice, and decision-making processes, students will make connections between their skills, interests, and values and their postsecondary options, whether in apprenticeship training, college, community living, university, or the workplace. They will set goals and create a plan for their first postsecondary year. As part of their preparation for the future, they will learn about personal financial management – including the variety of saving and borrowing tools available to them and how to use them to their advantage – and develop a budget for their first year after secondary school. Prerequisite: None

CHW3M	11	History	World History to the End of the	This course explores the history of various societies and civilizations around
CHY4U	12	History	Fifteenth Century  World History since the	the world, from earliest times to around 1500 CE. Students will investigate a range of factors that contributed to the rise, success, and decline of various ancient and pre-modern societies throughout the world and will examine life in and the cultural and political legacy of these societies. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating social, political, and economic structures and historical forces at work in various societies and in different historical eras. Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied
	12	nistory	Fifteenth Century	This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history.  Prerequisite: Any university or university/college preparation course in
				Canadian and world studies, English, or social sciences and humanities
CIA4U	12	Economics	Analysing Economic Issues	This course examines current Canadian and international economic issues, developments, policies, and practices from diverse perspectives. Students will explore the decisions that individuals and institutions, including governments, make in response to economic issues such as globalization, trade agreements, economic inequalities, regulation, and public spending. Students will apply the concepts of economic thinking and the economic inquiry process, as well as economic models and theories, to investigate, and develop informed opinions about, economic trade-offs, growth, and sustainability and related economic issues. Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
CLN4U	12	Law	Canadian and International Law	This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and other issues in both Canadian and international contexts. Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities
CLU3M	11	Law	Understanding Canadian Law	This course explores Canadian law, with a focus on legal issues that are relevant to the lives of people in Canada. Students will gain an understanding of laws relating to rights and freedoms in Canada; our legal system; and family, contract, employment, tort, and criminal law. Students will develop legal reasoning skills and will apply the concepts of legal thinking and the legal studies inquiry process when investigating a range of legal issues and formulating and communicating informed opinions about them.  Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied
EMS3O	11	English	Media Studies	This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analysing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgement, and skills in viewing, representing, listening, speaking, reading, and writing. Prerequisite: English, Grade 10, Academic or Applied
ENG4C	12	English	College Prep English	This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An

				important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace. Prerequisite: English, Grade 11, College Preparation
ENG4U	12	English	University Prep English	This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace. Prerequisite: English, Grade 11, University Preparation
EWC4U	12	English	The Writer's Craft	This course emphasizes knowledge and skills related to the craft of writing.  Students will analyse models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers. Prerequisite: English, Grade 11, University Preparation
GLS4O	12	Guidance and Career Education	Advanced Learning Strategies: Skills for Success After Secondary School	This course improves students' learning and personal-management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal-management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals. Prerequisite: None
GWL3O	11	Guidance and Career Education	Designing Your Future	This course prepares students to make successful transitions to postsecondary destinations as they investigate specific postsecondary options based on their skills, interests, and personal characteristics. Students will explore the realities and opportunities of the workplace and examine factors that affect success, while refining their job-search and employability skills. Students will develop their portfolios with a focus on their targeted destination and develop an action plan for future success. Prerequisite: None
HFA4U	12	Social Sciences Humanities	Health and Nutrition	This social science course focuses on food literacy and the relationship between health and nutrition at different stages of life (healthy eating, safe food prep practices) as well as global issues and food production (food security, environmental responsibility, sustainability) while using social science research and inquiry methods. Food literacy means knowing where food comes from, what impacts our food choices have on the environment, knowing what grows locally and what is imported, what foods are in season, and what food is healthy.
HHS4U	12	Social Sciences Humanities	Families in Canada	This course enables students to draw on sociological, psychological, and anthropological theories and research to analyse the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada's diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of research on individuals, intimate relationships, and parent-child relationships. Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

HLS3O	11	Social	Housing and Home Design	This course introduces students to a range of issues related to housing and
		Sciences		home design. Students will learn about the needs that housing fulfils; housing
		Humanities		options; home maintenance and safety; and environmental, economic, legal,
				and social considerations related to housing. They will use the elements and
				principles of design to analyse design and decorating decisions. Students will
				develop research skills as they investigate issues related to housing and home
				design. Prerequisite: None
HNC3C	11	Social	Understanding Fashion	This course introduces students to the world of fashion. Students will gain an
		Sciences		understanding of theories related to fashion trends and
		Humanities		of how culture, media, fashion cycles, retailing, and social and environmental
				factors influence fashion trends and consumer behaviour. Students will use
				various tools, technologies, and techniques safely and correctly to create
				fashion items. In addition, students will apply knowledge of fibres, fabrics, and
				the elements and principles of design when creating and assessing fashion-
				related products.
HPC3O	11	Social	Raising Healthy Children	This course focuses on the skills and knowledge parents, guardians, and
		Sciences		caregivers need, with particular emphasis on maternal
		Humanities		health, pregnancy, birth, and the early years of human development (birth to
				six years old). Through study and practical experience, students will learn
				how to meet the developmental needs of young children, communicate with
				them, and effectively guide their early behaviour. Students will develop their
				research skills through investigations related to caregiving and child rearing.
				Prerequisite: None
HSB4U	12	Social	Challenge and Change in	This course focuses on the use of social science theories, perspectives, and
		Sciences	Society	methodologies to investigate and explain shifts in knowledge, attitudes,
		Humanities		beliefs, and behaviour and their impact on society. Students will critically
				analyse how and why cultural, social, and behavioural patterns change over
				time. They will explore the ideas of social theorists and use those ideas to
				analyse causes of and responses to challenges such as technological change,
				deviance, and global inequalities. Students will explore ways in which social
				science research methods can be used to study social change.
				Prerequisite: Any university or university/college preparation course in social
				sciences and humanities, English, or Canadian and world studies
HSB4UF	12	Social	French Immersion - Challenge	This course focuses on the use of social science theories, perspectives, and
		Sciences	and Change in Society	methodologies to investigate and explain shifts in knowledge, attitudes,
		Humanities		beliefs, and behaviour and their impact on society. Students will critically
				analyse how and why cultural, social, and behavioural patterns change over
				time. They will explore the ideas of social theorists and use those ideas to
				analyse causes of and responses to challenges such as technological change,
				deviance, and global inequalities. Students will explore ways in which social
				science research methods can be used to study social change.
				Prerequisite: Any university or university/college preparation course in social
				sciences and humanities, English, or Canadian and world studies
HSC4M	12	Social	World Cultures	This course examines the nature of culture; how cultural identities are
		Sciences		acquired, maintained, and transformed; and theories used to analyse cultures.
		Humanities		Students will explore world cultures, with an emphasis on the analysis of
				religious and spiritual beliefs, art forms, and philosophy. They will study the
				contributions and influence of a range of cultural groups and will critically
				analyse issues facing ethnocultural groups within Canada and around the
				world. Students will develop and apply research skills and will design and
				implement a social action initiative relating to cultural diversity.
				Prerequisite: Any university, college, or university/college preparation course
	L			in social sciences and humanities, English, or Canadian and world studies
HSE4M	12	Social	Equity and Social Justice:	This course enables students to develop an understanding of the theoretical,
		Sciences	From Theory to Practice	social, and historical underpinnings of various equity and social justice issues
		Humanities		and to analyse strategies for bringing about positive social change. Students
				will learn about historical and contemporary equity and social justice issues in
				Canada and globally. They will explore power relations and the impact of a
				variety of factors on equity and social justice. Students will develop and apply
				research skills and will design and implement a social action initiative relating
				to an equity or social justice issue.
-				

				Prerequisite: Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies	
HSG3M	11	Social Sciences Humanities	Gender Studies	This course enables students to explore the social construction of gender. Students will learn about the dynamic nature of gender roles and norms; sexism and power relations; and the impact of representations of women and men in the media, popular culture, and the arts. Students will analyse a range of gender equity issues, including gender-based violence and workplace equity, in both Canadian and global contexts. Students will develop and apply research skills and will design and implement a social action initiative relating to gender equity. Prerequisite: None	
HSP3C	11	Social Sciences Humanities	Introduction to Anthropology, Psychology, and Sociology	This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. Students will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines.  Prerequisite: None	
HSP3U	11	Social Sciences Humanities	Introduction to Anthropology, Psychology, and Sociology	This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines. Prerequisite: The Grade 10 academic course in English, or the Grade 10 academic history course (Canadian and world studies)	
HSP3UF	11	Social Sciences Humanities	French Immersion - Introduction to Anthropology, Psychology, and Sociology	This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines. Prerequisite: The Grade 10 academic course in English, or the Grade 10 academic history course (Canadian and world studies)	
HZT4U	12	Social Sciences Humanities	Philosophy: Questions and Theories	This course enables students to acquire an understanding of the nature of philosophy and philosophical reasoning skills and to develop and apply their knowledge and skills while exploring specialized branches of philosophy (the course will cover at least three of the following branches: metaphysics, ethics, epistemology, philosophy of science, social and political philosophy, aesthetics).* Students will develop critical thinking and philosophical reasoning skills as they formulate and evaluate arguments related to a variety of philosophical questions and theories. They will also develop research and inquiry skills related to the study and practice of philosophy. Prerequisite: Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies	
ICS3C	11	Computer Studies	Introduction to Computer Programming	This course introduces students to computer programming concepts and practices. Students will write and test computer programs, using various problem-solving strategies. They will learn the fundamentals of program design and apply a software development life-cycle model to a software development project. Students will also learn about computer environments and systems, and explore environmental issues related to computers, safe computing practices, emerging technologies, and postsecondary opportunities in computer-related fields. Prerequisite: None	
ICS3U	11	Computer Studies	Introduction to Computer Science	This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows.	

				They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields. Prerequisite: None		
ICS4C	12	Computer Studies	Computer Programming	This course further develops students' computer programming skills. Students will learn object-oriented programming concepts, create object-oriented software solutions, and design graphical user interfaces. Student teams will plan and carry out a software development project using industry-standard programming tools and proper project management techniques. Students will also investigate ethical issues in computing and expand their understanding of environmental issues, emerging technologies, and computer-related careers.  Prerequisite: Introduction to Computer Programming, Grade 11, College Preparation		
ICS4U	12	Computer Studies	Computer Science	Preparation  This course enables students to further develop knowledge and skills in computer science. Students will use modular design principles to create complex and fully documented programs, according to industry standards. Student teams will manage a large software development project, from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field.  Prerequisite: Introduction to Computer Science, Grade 11, University Preparation		
MAP4C	12	Mathematics	Foundations for College Mathematics	This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.  Prerequisite: Foundations for College Mathematics, Grade 11, College Preparation, or Functions and Applications, Grade 11, University/College Preparation		
MBF3C	11	Mathematics	Foundations for College Mathematics	This course enables students to broaden their understanding of mathematics as a problemsolving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analysing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.  Prerequisite: Foundations of Mathematics, Grade 10, Applied		
MCR3U	11	Mathematics	Functions	This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.  Prerequisite: Principles of Mathematics, Grade 10, Academic		

MCV4U	12	Mathematics	Calculus and Vectors	This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in threedimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course.  Note: The new Advanced Functions course (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U).
MDM4U	12	Mathematics	Mathematics of Data Management	This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analysing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.  Prerequisite: Functions, Grade 11, University Preparation, or Functions and Applications, Grade 11, University/College Preparation
MHF4U	12	Mathematics	Advanced Functions	This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs. Prerequisite: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation
NBE3U	11	English	English: Understanding Contemporary First Nations, Métis, and Inuit Voices	This course explores the themes, forms, and stylistic elements of a variety of literary, informational, graphic, oral, cultural, and media text forms emerging from First Nations, Métis, and Inuit cultures in Canada, and also examines the perspectives and influence of texts that relate to those cultures. In order to fully understand contemporary text forms and their themes of identity, relationship, and self- determination, sovereignty, or selfgovernance, students will analyse the changing use of text forms by Indigenous authors/creators from various periods and cultures in expressing ideas related to these themes. Students will also create oral, written, and media texts to explore their own ideas and understanding, focusing on the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. The course is intended to prepare students for the compulsory Grade 12 English university or college preparation course. Prerequisite: English, Grade 10, Academic
OLC4O	12	English	Ontario Secondary School Literacy Course	This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing.

				Eligibility requirement: Students who have been eligible to write the OSSLT at
				least twice and who have been unsuccessful at least once are eligible to take
				the course. (Students who have already met the literacy requirement for graduation may be eligible to take the course under special circumstances, at
				the discretion of the principal.)
PPZ3C	11	Health and	Health for Life	This course enables students to examine the factors that influence their own
		Physical Education		health practices and behaviours as well as those factors that contribute to the development of healthy communities. It emphasizes the concept of
		Laucation		wellness, which addresses all aspects of well-being – physical, cognitive,
				emotional, spiritual, and social – and promotes healthy eating, physical
				activity, and building and maintaining a positive sense of self. Students will
				develop the skills necessary to make healthy choices and create a personal
				wellness plan. They will also design initiatives that encourage others to lead healthy, active lives. The course prepares students for college programs in
				health sciences, fitness, wellness, and health promotion.
				Prerequisite: None
PSK4U	12	Health and	Introductory	This course focuses on the study of human movement and of systems,
		Physical	Kinesiology	factors, and principles involved in human development. Students will
		Education		learn about the effects of physical activity on health and performance, the
				evolution of physical activity and sport, and the physiological, psychological, and social factors that influence an individual's participation
				in physical activity and sport. The course prepares students for university
				programs in physical education and health, kinesiology, health sciences,
				health studies, recreation, and sports administration.
				Prerequisite: Any Grade 11 university or university/college preparation
				course in science, or any Grade 11 or 12 course in health and physical education
SBI3C	11	Science	Biology	This course focuses on the processes that occur in biological systems. Students
				will learn concepts and theories as they conduct
				investigations in the areas of cellular biology, microbiology, genetics, the
				anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of
				concepts, and on the skills needed for further study in various branches of the
				life sciences and related fields. Prerequisite: Science, Grade 10, Academic or
				Applied
SBI3U	11	Science	Biology	This course furthers students' understanding of the processes that occur in
				biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the
				structure and function of animals; and the
				anatomy, growth, and function of plants. The course focuses on the
				theoretical aspects of the topics under study, and helps students refine skills
				related to scientific investigation. Prerequisite: Science, Grade 10, Academic
SCH3U	11	Science	Chemistry	This course enables students to deepen their understanding of chemistry
				through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions
				and solubility; and atmospheric chemistry and the behaviour of gases.
				Students will further develop their analytical skills and investigate the
				qualitative and quantitative properties of matter, as well as the impact of
				some common chemical reactions on society and the environment.
		Calarra	Ch a mailetin	Prerequisite: Science, Grade 10, Academic
SCH4C	12	Science	Chemistry	This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry,
				electrochemistry, chemical calculations, and chemistry as it relates to the
				quality of the environment. Students will use a variety of laboratory
				techniques, develop skills in data collection and scientific analysis, and
				communicate scientific information using appropriate terminology. Emphasis
				will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.
				Prerequisite: Science, Grade 10, Academic or Applied
				Trerequisite. Science, Grade 10, Academic of Applied

SCH4U	12	Science	Chemistry	This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of
				matter, energy changes and rates of reaction, equilibrium in chemical
				systems, and electrochemistry. Students will further develop their problem-
				solving and investigation skills as they investigate chemical processes, and will
				refine their ability to communicate scientific information. Emphasis will be
				placed on the importance of chemistry in everyday life and on evaluating the
				impact of chemical technology on the environment.Prerequisite: Chemistry,
				Grade 11, University Preparation
SES4U	12	Science	Earth and Space	This course develops students' understanding of Earth and its place in the
			Science	universe. Students will investigate the properties of and forces in the universe
				and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal
				and surficial processes, and its geological history, and will learn how Earth's
				systems interact and how they have changed over time. Throughout the
				course, students will learn how these forces,
				processes, and materials affect their daily lives. The course draws on biology,
				chemistry, physics, and mathematics in its consideration of geological and
				astronomical processes that can be observed directly or inferred from other
				evidence.Prerequisite: Science, Grade 10, Academic
SNC4M	12	Science	Science	This course enables students, including those pursuing postsecondary
				programs outside the sciences, to increase their understanding of science
				and contemporary social and environmental issues in health-related fields.
				Students will explore a variety of medical technologies, pathogens and disease, nutritional science, public health issues, and biotechnology. The
				course focuses on the theoretical aspects of the topics under study and helps
				refine students' scientific investigation skills.Prerequisite: Science, Grade 10,
				Academic, or any Grade 11 university, university/college, or college
				preparation course in science
SPH3U	11	Science	Physics	This course develops students' understanding of the basic concepts of
				physics. Students will explore kinematics, with an emphasis on linear motion;
				different kinds of forces; energy transformations; the properties of
				mechanical waves and sound; and electricity and magnetism. They will
				enhance their scientific investigation skills as they test laws of physics. In
				addition, they will analyse the interrelationships between physics and technology, and consider the impact of technological applications of physics
				on society and the environment.
				Prerequisite: Science, Grade 10, Academic
SPH4C	12	Science	Physics	This course develops students' understanding of the basic concepts of
			,	physics. Students will explore these concepts with respect to motion;
				mechanical, electrical, electromagnetic, energy transformation, hydraulic,
				and pneumatic systems; and the operation of commonly used tools and
				machines. They will develop their scientific investigation skills as they test
				laws of physics and solve both assigned problems and those emerging from
				their investigations. Students will also consider the impact of technological
				applications of physics on society and the environment.  Prerequisite: Science, Grade 10, Academic or Applied
SPH4U	12	Science	Physics	This course enables students to deepen their understanding of physics
3.1170			,	concepts and theories. Students will continue their exploration of energy
				transformations and the forces that affect motion, and will investigate
				electrical, gravitational, and magnetic fields and electromagnetic radiation.
				Students will also explore the wave nature of light, quantum mechanics, and
				special relativity. They will further develop their scientific investigation skills,
				learning, for example, how to analyse, qualitatively and quantitatively, data
				related to a variety of physics concepts and principles. Students will also
				consider the impact of technological applications of physics on society and
				the environment. Prerequisite: Physics, Grade 11, University Preparation
				Frerequisite. Friysics, Graue 11, University Preparation

TGP3M	11	Technology	Communications	Addicted to your smartphone? Use it to your advantage and learn how to		
			- Smartphone	increase your followers and likes by sharing lit photos you took! In this		
			Photography	course, you'll learn the history of photography, tips for taking amazing		
				photos with your smartphone, photo editing techniques for enhancing those		
				photos and how to build a portfolio worthy of a college application.		
				(smartphones will <i>not</i> be provided)		
THJ3M	11	Technology	Green Industries	This course enables students to develop knowledge and skills related to		
				agriculture, forestry, horticulture, and landscaping. Students		
				will study the identification, growth, and management of plants and animals		
				and develop process, design, and management skills required in the green		
				industries. Students will also examine social and economic issues related to		
				the green industries, learn about safe and healthy working practices, study		
				industry standards and codes, and will explore postsecondary education		
				programs and career opportunities.		
				Prerequisite: None		
TPJ3M	11	Technology	Healthcare	ourse enables students to develop their understanding of basic health care		
			(Practical	proce dures, including the safe use of appropriate		
			Nursing)	instruments, equipment, and materials. Students will focus on health care		
				fundamentals, including the anatomical features and physiology of the major		
				body systems and the factors that affect homeostasis in the human body.		
				Students will develop an awareness of health and safety issues in the health		
				care field, analyse environmental and societal issues related to health care,		
				and learn about pro fessional practice standards and career opportunities in		
				the field. Prerequisite: None		
TOJ4C	12	Technology	Child	This course enables students to examine the stages of child development and the aging process. Students will study the processes of		
			Development and Gerontology	disease and factors contributing to health and well-being in early and later life,		
				and will develop skills required to meet the needs of children and older adults		
				(care skills). Students will also learn about legislation governing the care of		
				children and older adults; evaluate social and recreational activities,		
				programs, and services for improving quality of life; and develop an		
				awareness of health and safety issues, environmental and social issues, and		
				career opportunities related to child care and gerontology.		
				Prerequisite: None		