

Stratford
Northwestern
Secondary School

Avon Maitland
District School Board
Secondary Schools



Program & Course
Course Calendar
2017-2018

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SNSS Course Calendar 2016

By Martin Ritsma - Principal

The Avon Maitland District School Board is committed to ensuring students have the opportunity to graduate secondary school in four years and to ensuring a variety of course offerings for our students. If students choose to remain in school for five years they need to plan, with support from Student Services and parents, so they have 3 courses in each semester. This is an Avon Maitland District School Board policy. This planning should begin in grade 9. In order to achieve both goals efficiently students need to be registered full time in each semester. Students in Avon Maitland District School Board secondary schools are required to register with a sufficient number of courses to be considered full time for each semester in which they attend our schools.

High school is a time for meeting new challenges, exploring new opportunities and making new friends. Northwestern's strengths are its students and its staff. Our programs prepare students for many different career paths. Whether you choose to attend university or college, pursue an apprenticeship or join the workforce immediately upon graduation, you will leave Northwestern with the skills you need to be successful.

Course selection is an important task for each student. With your future goals in mind, please consider your choices carefully, paying attention to the prerequisites, and the streams of each course. For example, if you know that you are going to pursue a post secondary education at the college level and you are interested in taking engineering, you must be sure that you have taken the correct Math, English and Science courses to allow you entrance into the program. Parents and students should be aware of the opportunity of selecting concurrently, courses from the Stratford Central calendar. For additional information on Concurrent Education, please contact Mr. Chris Cassone at chris.cassone@ed.amdsb.ca. Students may also enroll in online course through AMDEC. If you are not sure of the courses that you will need, please consult with Student Services.

School Objectives

The school will work to assist the students of Stratford Northwestern to reach their potential as individuals and as valuable members of society with the ability to think, feel, and act in a productive and responsible way. The Principal and Vice-Principals encourage parents or guardians with questions regarding their child's education to telephone 271-9740. Parents are also encouraged to connect with their child's teacher to facilitate ongoing communication.

Mission Statement

It is the mission of Stratford Northwestern Secondary School to develop, support and encourage lifelong learning in a caring educational community dedicated to create positive, inclusive learning environments that maximize student outcomes. Our educational goals will reflect the AMDSB goals which are summed up in three key words; Engage, Inspire and Innovate.

Learning Services Department

Stratford Northwestern is committed to inclusive education and aims to support all students in their learning goals. Some students may require extra support for academic success. Special Education Resource Teachers are available to assess special needs and to create an educational plan for students who require remedial help. This plan could include accommodations or ongoing support from resource teachers.

Changing Courses: Policy/Procedures

Students, in consultation with their parents, are encouraged to make informed choices during the course selection process in February. Students wishing to change a course must consult a guidance counsellor prior to the start of the course or within the first two weeks of the course. Changes will occur when the course change form is completed and only when scheduling and class size permit.

Resource Centre

Northwestern has a large Resource Centre. The Resource Centre includes a large collection of fiction, non-fiction, and reference books. We subscribe to a variety of magazines which are available for leisure reading and research. Desktop computers and wireless computer access are available throughout the Resource Centre.

English as a Second Language

The Avon Maitland District School Board recognizes that secondary English Language Learners face unique challenges as they pursue their secondary diploma and make the transition to full fluency in English. Students in the early stages of English acquisition may monitor courses or work for partial credits if they are not able to meet the curriculum expectations for a course. Adapted programming helps students achieve credits in courses even if their communication skills are not sufficiently developed to demonstrate their learning. ELL students may also be provided with tutoring to enable them to expand their language skills more rapidly. Avon Maitland District School Board students who take ELL are given the assistance they need to fulfill their long-term goals.

Extra-Curricular Education

Stratford Northwestern offers a wide variety of extra-curricular activities that take place beyond our regular classrooms. These activities range from athletics, to drama and music, to a large number of clubs and organizations. These activities take place before and after school, during the lunch period and on weekends. We encourage our students to be involved with our out-of-class activities to develop sportsmanship and good citizenship and to grow in self confidence and to learn life long, personal and intrapersonal skills.

Student Responsibilities

Attendance

Students who fail courses or choose to withdraw from a course may jeopardize their

attainment of an OSSD. Regular attendance at school is critical for the student's learning and achievement of course expectations

Student Conduct

Each school has a Code of Conduct, which is derived from Ministry of Education and Avon Maitland District School Board policies. It is contained in the booklet "Together for Safe Schools: Code of Conduct" which is available through each school and the Avon Maitland District School Board website at www.yourschools.ca.

Each student at Northwestern is expected to:

Respect him/herself and others; strive for personal excellence; follow the rules set by the school, the Avon Maitland District School Board and the Ministry of Education; participate actively and in a positive manner;

Arrive on time; arrive with the appropriate materials.

Physical, verbal (oral or written), sexual or psychological abuse, bullying, or discrimination on the basis of race, culture, religion, gender, language, disability, sexual orientation, or any other attribute is unacceptable.

Achievement

Students will be assessed and evaluated using a variety of techniques. Each student will receive a Course Information sheet specific to each course, which outlines the evaluation process in that course. A credit will be granted when a student has achieved the expectations of the course. Good work habits are essential for success.

Each student is expected to:

- ⦿ Be on time for and present in class;
- ⦿ Be prepared for class;
- ⦿ Put forth good effort, participate productively in class and complete all assigned work;
- ⦿ Behave in a polite and cooperative manner in class, which promotes learning for all students.

Student Fees

There will be no fees or cost charged to students to participate in the regular day school program. Fees may be charged where the student chooses to upgrade the material or where purchase of material is optional. Students enrolled in secondary schools in Avon Maitland District School Board can expect to be provided with the basic classroom learning resources that are required in order to complete the course expectations. It is recognized there may be optional resources that students may purchase to enhance their program; e.g. field trips, upgrading materials in courses such as construction technology and visual arts. Students are expected to come to school ready and willing to participate actively in

their own learning. To that end, students are expected to bring materials with them for their own personal note-taking (e.g. pencils, pens, paper, binders). Students are encouraged to purchase their school's student card by paying the student activity fee. The student card includes but is not limited to the benefit of participating in the co-instructional program and in the Student Council dances and activities. The fee may also be used to reduce the total cost of a student's yearbook. Students involved in co-instructional teams, groups and clubs will be made aware of any additional fund-raising obligations or participation fees prior to making a commitment to participate.

Mandatory Courses by Grade

Grade 9 Course

Students in Grade 9 will take the following 8 Compulsory Credits

- ⦿ **Canadian & World Studies** - CGC1D or CGC1DE or CGC1P
- ⦿ **English** - ENG1D or ENG1DE or ENG1L or ENG1P
- ⦿ **French** - FSF1D or FSF1P
- ⦿ **Mathematics** - MPM1D or MPM1DE or MAT1L or MFM1P
- ⦿ **Science** - SNC1D or SNC1DE or SNC1L or SNC1P
- ⦿ **Healthy Living** - PPL1OM or PPL1OF

Choose Two of the following:

- ⦿ **Music** - AMU1O
- ⦿ **Visual Arts** - AVI1O
- ⦿ **Drama** - ADA1O
- ⦿ **Introduction to Business** - BTT1O
- ⦿ **Social Science** - HFN1O
- ⦿ **Exploring Technologies** - TIJ1O
- ⦿ **Exploring Hairstyling & Aesthetics** - TXJ1O

Grade 10 Courses

Grade 10 will take the following 5 Compulsory Credits

- ⦿ **Canadian & World Studies** - CHC2D or CHC2DE or CHC2L or CHC2P
- ⦿ **Career Studies** (.5 credit) - GLC2O
- ⦿ **Civics and Citizenship** (.5 credit) - CHV2O
- ⦿ **English** - ENG2D or ENG2DE or ENG2L or ENG2P
- ⦿ **Mathematics** - MPM2D or MPM2DE or MAT2L or MFM2P

- ⦿ **Science** - SNC2D or SNC2DE or SNC2L or SNC2P

Choose 3 Additional Credits at the Grade 10 Level

Grade 11 Courses

Students in Grade 11 will take Compulsory English and Mathematics Credits

Students must check carefully that the requirements for the any additional compulsory credits are completed.

- ⦿ **English** - ENG3C or ENG3E or ENG3U or ENG3UE
- ⦿ **Mathematics** - MBF3C or MEL3E or MCF3M or MCR3U or MCR3UE

Choose Up to 6 Additional Credits:

Students in Grade 11 may select a Grade 12 course if prerequisite has been completed.

Grade 12 Courses

Grade 12 Students will choose a minimum of 6 Courses. All Students in Grade 12 must choose 1 English Course to Complete Diploma Requirements

- ⦿ **English** - ENG4C or ENG4E or ENG4U

Concurrent Education (Stratford Northwestern S.S. and Stratford Central S.S.)

Students who attend Stratford Northwestern SS and Stratford Central SS are reminded of the vast program and course opportunities that are available to them in the two schools. In order to broaden your educational experience, a Central student may desire to take a course(s) at Northwestern or a Northwestern student may desire to take a course(s) at Central while remaining a student and receiving their diploma at their home school. If a student at either school is unable to schedule a desired class in his or her home school we encourage you to speak with your Student Services Department who will work to see if your request can be accommodated between the two schools. Stratford Northwestern, for example, offers a broader selection of courses in Technological Education at the senior level and offers a Specialist High Skills, in Energy; Health and Wellness; Hospitality and Tourism; Manufacturing and Transportation. Stratford Central offers a broader selection of courses in The Arts and offers a Specialist High Skills Major in Arts and Culture (which includes Theatre Production) and a Specialist High Skills Major in Information & Communication Technology. Stratford Central also offers Advanced Placement courses at the senior level. Both schools have many diversified courses our students may wish to consider to get the best educational opportunities available to pursue their many pathways to work, apprenticeship, college or university. We encourage you to consider concurrent education when you are making your course selection in February both at Stratford Northwestern and Stratford Central. For further information about concurrent education, please contact Chris Cassone chris.cassone@ed.amdsb.ca.

Experiential Learning

Schools are offering more opportunities to customize your high school experience and build on your strengths and interests through a variety of new and enhanced learning options including Experiential Learning. Experiential Learning programs such as Co-op, Dual Credits, Ontario Youth Apprenticeship Program (OYAP) and Specialist High Skills Major (SHSM) enhance your academic background and provide you with opportunities to gain valuable experiences in our community.

No matter what your post-secondary pathway may be, experiential learning can assist you in making career decisions and help you develop the knowledge, skills and habits required in the workplace. All forms of experiential learning are a valuable complement to your post-secondary preparation and future employment.

Dual Credit Offerings at Conestoga, Fanshawe and Lambton Colleges

What is a Dual Credit Program

Dual credit programs allow senior high school students the opportunity to earn high school and college credits at the same time. Students typically attend Conestoga, Fanshawe or Lambton College's campuses once a week for a fifteen week period. This unique arrangement allows you, the student, the chance to experience life and learning in a college environment and allows you to fast track towards your post-secondary goals.

Examples of dual credit offerings include:

- Digital Photography
- Basic Plumbing
- Basic Electrical
- Intro to Early Childhood Education
- Baking & Pastry Arts
- Basic Welding Process and Fabricating
- Health and Wellness Fundamentals
- Recreation and Leisure

Program availability is subject to change. A maximum of 4 college-delivered dual credits can be counted as optional credits towards the Ontario Secondary School Diploma (OSSD). Dual Credits cannot be used as substitutions for compulsory credit requirements.

What does it cost?

You pay nothing. All books, transportation and tuition are paid for through grants from the School College Work Initiative (SCWI). SCWI is a collaborative partnership between the Ministry of Education and the Ministry of Training, Colleges and Universities.

What makes a student eligible?

Dual credit programs are intended to assist secondary school students in the completion of their OSSD and provide a successful transition to college and apprenticeship programs. As well, students in Specialist High Skills Major (SHSM) programs and the Ontario Youth Apprenticeship Programs (OYAP) are eligible to enroll. Enrolment in half or full day Co-op allows greater flexibility to participate.

How do I apply?

You **MUST** be referred to the program through your School Student Success Team. Avon Maitland College partners will not accept applications directly.

To find out what dual credit offerings are available and to take advantage of this great opportunity, contact your Guidance Counselor, Student Success teacher or Co-op teacher for an up-to-date listing of course offerings and to obtain an application form. More information can be found at successforlife.ca!

Ontario Youth Apprenticeship Program

- ⦿ Are you a hands on learner?
- ⦿ Do you like to solve problems?
- ⦿ Are you good at fixing things?
- ⦿ Do you find it difficult to sit in a classroom all day?

If you answered yes to any of the above, the apprenticeship pathway may be for you!

Get started on your apprenticeship while in high school. The Ontario Youth Apprenticeship Program (OYAP) allows you to be considered an OYAP Participant and earn cooperative education credits for work experience in an apprenticeable trade. You may or may not be formally registered as an apprentice while attending secondary school. To participate in OYAP you must: be at least 16 years of age, have completed a minimum of 16 credits, be a full-time student working towards completion of your diploma and complete OYAP participant form.

A student who participates in OYAP must have a Personalized Placement Learning Plan (PPLP) that is based on the on-the-job training requirements outlined in the government approved training standard for that trade. Training Standard competency booklets can be found at your local Ministry of Training, College and Universities (MTCU) office.

Fast track through an apprenticeship now and take advantage of Dual Credit and Specialist High Skills Major opportunities. See your Guidance Counsellor or Co-op teacher to apply. For more information, visit successforlife.ca and oyap.com.

Specialist High Skills Majors

The SHSM is a specialized program that allows students to focus their learning on a specific economic sector while meeting the requirements for the Ontario Secondary School

Diploma (OSSD) and assist in their transition from secondary school to apprenticeship training, college, university, or the workplace. SHSM allow students to focus on a career path that matches their skills and interests. Visit www.successforlife.ca to view the SHSM sectors available at this school.

Every SHSM must include the following five components:

- ⦿ A bundle of 8-10 Grade 11 and 12 courses in the selected field that includes 2 cooperative education credits
- ⦿ Sector-recognized certifications and/or training courses
- ⦿ Experiential learning activities within the sector
- ⦿ Reach Ahead experiences connected with the student's chosen post-secondary pathway
- ⦿ Development of key Essential Skills and Work Habits required for the sector; and the use of the Ontario Skills Passport (OSP) for purposes of documentation

Benefits to students enrolled in a SHSM program:

- ⦿ Customize their secondary school education to suit their interests and talents.
- ⦿ Develop specialized knowledge and skills.
- ⦿ Earn credits that post-secondary educational institutions and the sector recognize.
- ⦿ Gain sector-recognized certification and career-relevant training.
- ⦿ Develop essential skills and work habits documented through the Ontario Skills Passport.
- ⦿ Identify, explore and refine career goals and make informed decisions about their future.
- ⦿ Remain flexible, with the option to shift between pathways, should their goals and plans change.

For more information, visit www.successforlife.ca

Avon Maitland District E-Learning Centre (AMDEC)

AMDEC is a fully online secondary school within the Avon Maitland DSB, which offers courses from grade 9 to grade 12 in most subject areas. Our courses are taught by experienced AMDSB teachers who are committed to student success through a quality eLearning experience. Your success as a student is also supported by our principal, vice principal, program coordinator, guidance counsellor, technical help department, office staff and the home school. Our goal at AMDEC is to provide you with the best possible eLearning experience. We believe that our program provides an excellent educational opportunity for all of our students.

AMDEC delivers a non-semestered, modified continuous intake program. With the permission of your home school, you may start AMDEC courses any time between September and mid-February, but all students must finish their courses by early June. You have flexible deadlines for your assignments; however, you are responsible for establishing an assignment completion schedule that meets both AMDEC's due dates and your own

needs (for example, completing the course by the end of first semester or meeting post-secondary mark submission deadlines). You are encouraged to complete courses prior to the final due date. Module completion requirements and a list of important due dates are posted in the Student Handbook and are also available on our website: www.amdec.ca.

Students wishing to take an AMDEC course must register through the guidance department of their home school. You may consider eLearning courses for a number of reasons: to take a course that is not offered at your home school; to solve a timetable conflict; and to experience eLearning before starting post-secondary education. To succeed in eLearning, you need to have: self-motivation, organization, self-direction, time management, computer proficiency, and honesty.

AMDEC's course offerings are determined in the spring of each school year. A list of courses that are currently offered can be found under the Courses tab on our website: www.amdec.ca.

What You Need to Graduate

18 Compulsory Credits

Students must earn the following compulsory credits to obtain the Ontario Secondary School Diploma:

4 English Credits (1 credit per grade)

- ⦿ Grade 9
- ⦿ Grade 10
- ⦿ Grade 11
- ⦿ Grade 12

3 Mathematics Credits (1 credit in grade 11 or 12)

- ⦿ Grade 9
- ⦿ Grade 10
- ⦿ Grade 11 or 12

2 Science Credits

- ⦿ Grade 9
- ⦿ Grade 10
- ⦿ **1 Canadian History Credit**
- ⦿ **1 Canadian Geography Credit**
- ⦿ **1 Arts Credit**
- ⦿ **1 Health & Physical Education Credit**

- ⦿ **1 French as a Second Language Credit**
- ⦿ **0.5 Career Studies Credit**
- ⦿ **0.5 Civics Credit**

Plus one credit from each of the following groups

- ⦿ **1 Additional Credit** in English, or French as 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 & physical education, or the arts, or business studies, or French as a second language, or cooperative education
- ⦿ **1 Additional Credit** in science (grade 11 or 12), or technological education, or French as a second language, or computer studies, or cooperative education.

In Addition, Students Must Complete:

- ⦿ 12 Optional Credits
- ⦿ 40 Hours of Community Services Activities
- ⦿ The Provincial Literacy Requirement

The Arts

ADA10, Dramatic Arts, Grade 9, Open

This course provides opportunities for students to explore dramatic forms and techniques, using material from a wide range of sources and cultures. Students will use the elements of drama to examine situations and issues that are relevant to their lives. Students will create, perform, discuss, and analyse drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.

AMU10, Music, Grade 9, Open

This course emphasizes the creation and performance of music at a level consistent with previous experience and is aimed at developing technique, sensitivity, and imagination. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop an understanding of the conventions and elements of music and of safe practices related to music, and will develop a variety of skills transferable to other areas of their life.

AVI10, Visual Arts, Grade 9, Open

This course is exploratory in nature, offering an overview of visual arts as a foundation for further study. Students will become familiar with the elements and principles of design and the expressive qualities of various materials by using a range of media, processes, techniques, and styles. Students will use the creative and critical analysis processes and will interpret art within a personal, contemporary, and historical context.

ADA20, Dramatic Arts, Grade 10, Open

This course provides opportunities for students

to explore dramatic forms, conventions, and techniques. Students will explore a variety of dramatic sources from various cultures and representing a range of genres. Students will use the elements of drama in creating and communicating through dramatic works. Students will assume responsibility for decisions made in the creative and collaborative processes and will reflect on their experiences.

AMG20, Music, Grade 10, Open

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

AMU20, Music, Grade 10, Open

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

ASM20, Media Arts, Grade 10, Open

This course enables students to create media art works by exploring new media, emerging

technologies such as digital animation, and a variety of traditional art forms such as film, photography, video, and visual arts. Students will acquire communications skills that are transferable beyond the media arts classroom and develop an understanding of responsible practices related to the creative process. Students will develop the skills necessary to create and interpret media art works.

**AVI20,
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. 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.

**ADA3M,
Dramatic Arts,
Grade 11, University/College Preparation**

This course requires students to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences. **Prerequisite: Dramatic Arts, Grade 9 or 10**

**AMG3O,
Music,
Grade 11, Open**

This course will focus on the playing of the guitar, including electric and rock band repertoire. Students will develop musical literacy through performance, preparation, and presentation of music productions. Students will perform works at a level consistent with previous experience. Independently and collaboratively, students will use current

technology and the creative and critical analysis processes to plan, produce, present, and market musical productions. Students will respond to, reflect on, and analyse music from various genres and will develop skills transferable to other aspects of their life and careers.

Prerequisite: Music, Grade 9 or 10

**AMU3M,
Music,
Grade 11, Open**

This course 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. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers.

Prerequisite: Music, Grade 9 or 10, Open

**ASM3O,
Media Arts,
Grade 11, Open**

This course enables students to create media art works using available and emerging technologies such as computer animation, digital imaging, and video, and a variety of media. Students will explore the elements and principles of media arts, the connections between contemporary media art works and traditional art forms, and the importance of using responsible practices when engaged in the creative process. Students will develop the skills necessary to create and interpret media art works. **Prerequisite: Any Grade 9 or 10 Arts, Recommended prerequisite: Media Arts, Grade 10**

**AVI3M,
Visual Arts,
Grade 11, University/College Preparation**

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: Any Grade 9 or 10 Arts, Recommended prerequisite: Visual Arts, Grade 10**

AVI30,
Visual Arts,
Grade 11, Open

This course focuses on studio activities in the visual arts, including drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process. Students will also explore works of art within a personal, contemporary, historical, and cultural context. **Prerequisite: Any Grade 9 or 10 Arts, Recommended prerequisite: Visual Arts, Grade 10**

ADA4M,
Dramatic Arts,
Grade 12, University/College Preparation

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. Students will examine the significance of dramatic arts in various cultures, and will analyze how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school. **Prerequisite: Dramatic Arts, Grade 11**

AMG4M,
Music,
Grade 12, University/College Preparation

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. Students will analyze how to apply skills developed in music to their life and careers. This is a course in guitar music. **Prerequisite: Music, Grade 11 AMG30**

AMU4M,
Music,
Grade 12, University/College Preparation

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. Students will analyze how to apply skills developed in music to their life and careers. **Prerequisite: Music, Grade 11 University/College Preparation**

ASM4M,
Media Arts,
Grade 12, University/College Preparation

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: Media Arts, Grade 11 University/College Preparation**

AVI4M,
Visual Arts,
Grade 12, University/College Preparation

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. The studio program enables students to explore a range of materials, processes, and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts. **Prerequisite: Visual Arts, Grade 11, University/College Preparation**

Business Studies

BTT1O,
Information and Communication Technology in Business,
Grade 9, Open

This course introduces students to information and communication technology in a business environment and builds a foundation of digital literacy skills necessary for success in a technologically driven society. Students will develop word processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skill, and current issues related to the impact of information and communication technology.

BBI2O,
Introduction to Business,
Grade 10, Open

This course introduces students to the world of business. Students will develop an

understanding of the functions of business, including accounting, marketing, information and communication technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives.

ICS20,
Introduction to Computer Studies,
Grade 10, Open

This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

BMI3C,
Marketing: Goods, Services, Events,
Grade 11, College Preparation

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.

BAF3M,
Financial Accounting Fundamentals,
Grade 11, University/College Preparation

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 current issues and ethics in accounting.

**BDI3C,
Entrepreneurship: The Venture,
Grade 11, College Preparation**

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. **(Will not be offered in 2017-2018. May be offered in 2018-2019)**

**ICS3C,
Introduction to Computer Programming,
Grade 11, College Preparation**

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 post secondary opportunities in computer-related fields.

**ICS3U,
Introduction to Computer Science,
Grade 11, University Preparation**

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.

**BAT4M,
Financial Accounting Principles,
Grade 12, University/College Preparation**

This course introduces students to advanced accounting principles that will prepare them for post secondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students' knowledge of sources of financing, further develops accounting methods for assets, and introduces accounting for partnerships and corporations. **Prerequisite: Financial Accounting Fundamentals, Grade 11, University/College Preparation**

**BOH4M,
Business Leadership: Management
Fundamentals,
Grade 12, University/College Preparation**

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.

**ICS4C,
Computer Programming,
Grade 12, College Preparation**

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,
Computer Science,
Grade 12, University 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 analyze 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**

Canadian & World Studies

CGC1D,
Issues in Canadian Geography,
Grade 9, Academic

This course examines interrelationships within and between Canada's natural and human systems and how these systems interconnect with those in other parts of the world. Students will explore environmental, economic, and social geographic issues relating to topics such as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place to live.

CGC1DE,
Issues in Canadian Geography,
Grade 9, Academic, Enriched

This course examines interrelationships within and between Canada's natural and human systems and how these systems interconnect with those in other parts of the world. Students

will explore environmental, economic, and social geographic issues relating to topics such as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place to live. The academic curriculum will be enriched through the in depth study of selected topics and individually tailored projects.

CGC1P,
Issues in Canadian Geography,
Grade 9, Applied

This course focuses on current geographic issues that affect Canadians. Students will draw on their personal and everyday experiences as they explore a range of issues, including food and water supplies, competing land uses, and interactions with the natural environment, developing their awareness that issues that affect their lives are interconnected with issues in other parts of the world. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate choices related to sustainable living in Canada.

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 groups 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 Canadian identity, citizenship, and heritage. 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.

**CHC2DE,
Canadian History Since World War I,
Grade 10, Academic, Enriched**

This course explores social, economic, and political developments and events and their impact on the lives of different groups 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 Canadian identity, citizenship, and heritage. 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. The academic curriculum will be enriched through the in depth study of selected topics and individually tailored projects.

**CHC2L,
Canadian History,
Grade 10, Locally Developed, Compulsory**

This course focuses on the connections between the student and key people, events, and themes in Canadian history from World War I to the present. Students prepare for the Grades 11 and 12 Workplace Preparation history courses through the development and extension of historical literacy and inquiry skills. Students explore a variety of topics highlighting individuals and events that have contributed to the story of Canada. The major themes of Canadian identity, internal and external relationships, and changes since 1914, are explored through guided investigation. Students have the opportunity to extend analytical skills with a focus on identifying and interpreting events and perspectives and making connections. Students practice reading, writing, visual, and oral literacy skills, and mathematical literacy skills to identify and communicate ideas in a variety of forms.

**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 since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to Canadian heritage and identity. Students 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.

**CHV2O, (0.5 Credit)
Civics and Citizenship,
Grade 10, Open**

This course explores rights and responsibilities associated with being an active citizen in a democratic society. Students will explore issues of civic importance such as healthy schools, community planning, environmental responsibility, and the influence of social media, while developing their understanding of the role of civic engagement and of political processes in the local, national, and/or global community. Students will apply the concepts of political thinking and the political inquiry process to investigate, and express informed opinions about, a range of political issues and developments that are both of significance in today's world and of personal interest to them.

**CGG3O,
Travel and Tourism:
A Geographical Perspective,
Grade 11, Open**

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: Canadian Geographic Issues, Grade 9, Academic or Applied

**CHW3M,
World History to the End of the
Fifteenth Century,
Grade 11, University/College Preparation**

This course explores the history of various societies around the world, from earliest times to around 1500 CE. Students will examine life in and the legacy of various ancient and pre-modern societies throughout the world, including those in, Africa, Asia, Europe, and the Americas. 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

**CLU3M,
Understanding Canadian Law,
Grade 11, University/College Preparation**

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 rights and freedoms in Canada, our legal system, and family, contract, employment, tort, and criminal law. Students will use case studies and apply the concepts of legal thinking and the legal inquiry process to develop legal reasoning skills and to formulate and communicate informed interpretations of legal issues, and they will develop the ability to advocate for new laws. **Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied**

**CLU3E,
Understanding Canadian Law In Everyday life,
Grade 11, Workplace Preparation**

This course enables students to develop a practical understanding of laws that affect the everyday lives of people in Canada, including their own lives. Students will gain an understanding of the need for laws, and of their rights, freedoms, and responsibilities under Canadian law. Topics include laws relating to marriage, the workplace, cyberbullying, and the processing of criminal offences. Students will apply the concepts of legal thinking and the legal inquiry process, and will begin to develop legal reasoning skills and an understanding of Canadian law. **Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied, or a locally developed compulsory course (LDCC)**

**CGW4C,
World Issues: A Geographic Analysis,
Grade 12, College Preparation**

This course explores the global challenge of meeting the basic needs of all people while sustaining the natural environment. Students will examine global inequities, including those related to food, water, energy, and development, and will explore global issues through environmental, social, economic, and political lenses. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate a range of current geographic issues facing Canada and the world. **Prerequisite: Canadian Geographic Issues, Grade 9, Academic or Applied**

**CGW4U,
World Issues: A Geographic Analysis,
Grade 12, University Preparation**

This course looks at the global challenge of creating a more sustainable and equitable world. Students will explore a range of issues involving environmental, economic, social, and geopolitical interrelationships, and will examine governmental policies related to these issues. Students will apply the concepts of geographic

thinking and the geographic inquiry process, including spatial technologies, to investigate these complex issues, including their impact 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**

CHM4E,
Adventures in World History,
Grade 12, Workplace Preparation

This course examines significant developments and events in world history from earliest times to the present. Students will explore social, economic, and political forces in different times and places, and how technology, art, and religion have helped shape people's lives and identities. Students will apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating a variety of human experiences in world history. **Prerequisite: Canadian History since World War I, Grade 10, Academic or Applied, or a locally developed compulsory course (LDCC)**

CHY4C,
World History Since the Fifteenth Century,
Grade 12, College Preparation

This course explores key developments and events in world history since approximately 1450, with a focus on interactions within and between various regions. Students will examine social, economic, and political developments and how they have affected different peoples. 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 key turning points in world history and historical forces that have shaped our world. **Prerequisite: Any university, university/college, or college preparation course in Canadian and world studies, English, or social sciences and humanities**

CHY4U,
World History Since The Fifteenth Century,
Grade 12, University Preparation

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 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.**

CLN4U,
Canadian and International Law,
Grade 12, University Preparation

This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop their understanding of the principles of Canadian and international law when exploring rights and freedoms within the context of topics such as religion, security, cyberspace, immigration, crimes against humanity, and environmental protection. Students will apply the concepts of legal thinking and the legal inquiry process when investigating these issues in both Canadian and international contexts, and they will develop legal reasoning skills and an understanding of conflict resolution in the area of international law. **Prerequisite: Any university or university/college preparation course in Canadian and World Studies, English, or Social Sciences and Humanities**

IDC30,
Interdisciplinary Studies,
Grade 11, Open

This course will help students combine the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and

present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research, students will analyse the connections among diverse subjects and disciplines; develop information literacy skills in analysing, selecting, evaluating, and communicating information; and become aware of a variety of resources and viewpoints on contemporary issues. They will also examine their own learning styles; relate their inquiries and research to real-life situations, and investigate career opportunities in new disciplines.

**IDC4O,
Interdisciplinary Studies,
Grade 12, Open**

This course emphasizes the development of practical skills and knowledge to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Through individual and collaborative inquiry and research into contemporary issues, real-life situations, and careers, students will apply the principles and skills derived from the complementary subjects and disciplines studied, evaluate the reliability of information, and examine how information technology can be used safely, effectively, and legally. They will also learn how to select strategies to define problems, research alternative solutions, assess their thinking in reaching decisions, and adapt to change as they acquire new knowledge.

**IDC4U,
Interdisciplinary Studies,
Grade 12, University Preparation**

This course will help students develop and consolidate the skills required for and knowledge of different subjects and disciplines to solve problems, make decisions, create personal meaning, and present findings beyond the scope of a single subject or discipline. Students will apply the principles and processes of inquiry and research to effectively use a range of print, electronic, and mass media resources, to analyse historical innovations and exemplary research; and

to investigate real-life situations and career opportunities in interdisciplinary endeavours. They will also assess their own cognitive and affective strategies, apply general skills in both familiar and new contexts, create innovative products, and communicate new knowledge.

Prerequisites: any university or university/college preparation course

English

**ENG1D,
English,
Grade 9, Academic**

This course is designed to develop the 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 analyze literary texts from contemporary and historical periods, interpret informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the use of strategies that contribute to effective communication. The course is intended to prepare students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12.

**ENG1DE,
English,
Grade 9, Academic, Enriched**

This course is designed to develop the 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 analyze literary texts from contemporary and historical periods, interpret informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the use of strategies that contribute to effective communication. The course is intended to prepare students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12. This course also provides students with an opportunity to extend and enrich their learning

through a self-directed unit, which allows them to explore aspects of English of interest to them.

**ENG1L,
English,
Grade 9, Locally Developed**

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.

**ENG1P,
English,
Grade 9, Applied**

This course is designed to develop the key oral communication, reading, writing, and media literacy skills students need for success in secondary school and daily life. Students will read, interpret, and create a variety of informational, literary, and graphic texts. An important focus will be on identifying and using appropriate strategies and processes to improve students' comprehension of texts and to help them communicate clearly and effectively. The course is intended to prepare students for the Grade 10 applied English course, which leads to college or workplace preparation courses in Grades 11 and 12.

**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 analyze 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 11 university or college preparation course. **Prerequisite: English, Grade 9, Academic or Applied**

**ENG2DE,
English,
Grade 10, Academic, Enriched**

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 analyze 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 11 university or college preparation course. This course also provides students with an opportunity to extend and enrich their learning through a self-directed unit, which allows them to explore aspects of English of interest to them. **Prerequisite: English, Grade 10, Applied**

**ENG2L,
English,
Grade 10, Locally Developed**

In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives, in the workplace, in the English, Grade 11, Workplace Preparation course, or in the English: Contemporary Aboriginal Voices, 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. Students 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**

**ENG3C,
English,
Grade 11, College Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, 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. The course is intended to prepare students for the compulsory Grade 12 college preparation course. **Prerequisite: English, Grade 10, Applied**

**ENG3E,
English,
Grade 11, Workplace Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of

contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course. **Prerequisite: English, Grade 10, Applied or Locally Developed**

**ENG3U,
English,
Grade 11, University Preparation**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze challenging literary texts from various periods, countries, and cultures as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course. **Prerequisite: English, Grade 10, Academic**

**ENG3UE,
English,
Grade 11, University Preparation, Enriched**

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze challenging literary texts from various periods, countries, and cultures as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course. This course also provides students with an opportunity to extend and enrich their learning through a self-directed

unit, which allows them to explore aspects of English of interest to them. **Prerequisite: English, Grade 10, Academic**

**ENG4C,
English,
Grade 12, College Preparation**

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyze 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**

**ENG4E,
English,
Grade 12, Workplace Preparation**

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 analyze 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: English, Grade 11, Workplace Preparation**

**ENG4U,
English,
Grade 12, University Preparation**

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 analyze 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**

**ENG4UE,
English,
Grade 12, University Preparation, Enriched**

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 analyze 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. This course also provides students with an opportunity to extend and enrich their learning through a self-directed unit, which allows them to explore aspects of English of interest to them. **Prerequisite: English, Grade 11, University Preparation**

**OLC4O,
Ontario Secondary School Literacy Course,,
Grade 12, Open**

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 requirements: Students who have been eligible to write the OSSLT at least once and who have been unsuccessful 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.)**

French

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 continue to develop language knowledge and skills 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 the skills necessary to become life-long language learners. **Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent**

FSF1P, Core French, Grade 9, Applied

This course provides opportunities for students to communicate and interact in French in structured situations on everyday topics and to apply their knowledge of French in everyday situations. Students will continue to develop language knowledge and skills introduced in the elementary Core French program, through practical applications and concrete examples, and will use creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse

French-speaking communities, and will develop the skills necessary to become life-long language learners. **Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent**

FSF2D, Core French, Grade 10, Academic

This course provides opportunities for students to communicate in French about personally relevant, familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will continue to develop their language knowledge and skills through the selective use of strategies that contribute to effective communication. They will also increase their understanding and appreciation of diverse French-speaking communities, and will continue to develop the skills necessary to become life-long language learners. **Prerequisite: Core French, Grade 9, Academic or Applied**

FSF3U, Core French, Grade 11, University Preparation

This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their creative and critical thinking skills through responding to and exploring a variety of oral and written texts. They will continue to broaden their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary for life-long language learning. **Prerequisite: Core French, Grade 10, Academic**

FSF4U, Core French, Grade 12, University Preparation

This course provides extensive opportunities for students to speak and interact in French independently. Students will apply language-learning strategies in a wide variety of real-life situations, and will continue to develop their

creative and critical thinking skills through responding to and interacting with a variety of oral and written texts. Students will also continue to enrich their understanding and appreciation of diverse French-speaking communities and to develop the skills necessary for life-long language learning. **Prerequisite: Core French, Grade 11, University Preparation**

Guidance & Career Education

GLE10,
Learning Strategies 1: Skills for Success in Secondary School,
Grade 10, Open

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond. **Prerequisite: Recommendation of the Principal**

GPP30,
Career Studies,
Grade 10, Open

This course prepares students to act in leadership and peer support roles. They 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 -- for example, as a student council member or a peer tutor. Students will examine group dynamics and learn the value of diversity within groups and communities.

GLC20, (0.5 Credit)
Career Studies,
Grade 10, Open

This course teaches students how to develop and achieve personal goals for future learning, work, and community involvement.

Students will assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and 13 career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan.

Health & Physical Education

PPL10F,
Healthy Active Living Education,
Grade 9, Female, Open

This course equips students with the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provides a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

PPL10M,
Healthy Active Living Education,
Grade 9, Male, Open

This course equips students with the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provides a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

**PPL2OF,
Healthy Active Living Education,
Grade 10, Female, Open**

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students' learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness, and health; examination of 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.

**PPL2OM,
Healthy Active Living Education,
Grade 10, Male, Open**

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities, students develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively.

**PPL3O,
Healthy Active Living Education,
Grade 11, Open**

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn

how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. **Recommended preparation: Healthy Active Living Education, Grade 10, Open**

**PAL3O,
Fitness and Conditioning,
Grade 11, Open**

This course focuses on healthy active living through participation in a wide variety of fitness and conditioning training methods, sports, and recreational activities that have the potential to engage students' interest throughout their lives. It will combine a large physical component with theoretical concepts. Students will have the opportunity to train within a vast and varied selection of fitness components: core; endurance; speed; agility; strength; power; flexibility and high intensity interval training. Students will monitor their progress through an assortment of robust fitness testing and body composition testing methods. This course is recommended for varsity and skilled athletes, however, the course is open to students of all abilities interested in advancing their personal fitness through physical challenge, goal setting, nutrition awareness, and creating and implementing individualized training programs.

**PAL4O,
Fitness and Conditioning,
Grade 12, Open**

This course focuses on healthy active living through participation in a wide variety of fitness and conditioning training methods, sports, and recreational activities that have the potential to engage students' interest throughout their lives. It will combine a large physical component with theoretical concepts. Students will have the opportunity to train within a vast and varied selection of fitness components: core; endurance; speed; agility; strength; power; flexibility and high intensity interval training. Students will monitor their progress through an assortment of robust fitness testing and body

composition testing methods. This course is recommended for varsity and skilled athletes, however, the course is open to students of all abilities interested in advancing their personal fitness through physical challenge, goal setting, nutrition awareness, and creating and implementing individualized training programs.

Recommended preparation: Personal Training, Grade 11, Open

**PPL4O,
Healthy Active Living Education,
Grade 12, Open**

This course enables students to further develop the knowledge and skills they need to make healthy choices. It places special emphasis on how students can maintain the habits of healthy, active living through their lives as they make the transition to adulthood and independent living. Through participation in a wide range of physical activities in a variety of settings, students can enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. **Recommended preparation: Healthy Active Living Education, Grade 11, Open**

**PSK4U,
Introductory Kinesiology,
Grade 12, University Preparation**

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health, 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/ College Preparation course in Science, or any Grade 11 or 12 course in Health and Physical Education

Learning Services

Exceptional Students

IIRC or IEP

Students formally identified by IIRC or with an IEP may access the Resource Room throughout the school day to get assistance with assignments, homework and test preparation. Student progress is monitored on a regular basis and assistance is available when requested. After school assistance is also available individually or in a small group setting.

Modified Program

Some students may require changes to the Ontario Curriculum expectations for a course in order to meet their learning needs. For example, these changes could include increases or decreases in the number of learning expectations, and/or (increase or decrease) in the complexity of learning expectations. Within modified programming students may earn a credit, partial credit, or no credit depending the strengths of the student. Modified programming can be accessed for students who are identified by the Identification Placement and Review Committee process.

Gifted Program

Students who have been identified as gifted may participate in the AMDSB gifted modules in Grades 9 and 10. There are four modules per year offering students enrichment opportunities on a range of topics.

Enriched Classes

Enriched classes are available for students who are high achievers or who have been recommended as potentially gifted learners by teachers, parents, peers or as a result of psychometric testing or have special interests

or motivations. Students should check course listings for enriched classes. The letter E at the end of the course code indicates enriched.

Mathematics

MPM1D, **Principles of Mathematics,** **Grade 9, Academic**

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

MPM1DE, **Principles of Mathematics,** **Grade 9, Academic, Enriched**

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems or other topics of interest to students.

MAT1L, **Mathematics,** **Grade 9, Locally Developed**

This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, 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. Students have opportunities to further develop 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.

MFM1P, **Foundations of Mathematics,** **Grade 9, Applied**

This course enables students to develop an understanding of mathematical concepts related to introductory algebra, proportional reasoning, and measurement and geometry through investigation, the effective use of technology, and hands-on activities. Students will investigate real-life examples to develop various representations of linear relations, and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. **Note: Students who wish to take Principles of Mathematics, Grade 10, Academic (MPM2D) after completing this course will need to take a transfer course.**

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

investigations, 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: Principles of Mathematics, Grade 9, Academic**

MPM2DE,
Principles of Mathematics,
Grade 10, Academic, Enriched

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. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems or other topics of interest to students.

Prerequisite: Principles of Mathematics, Grade 9, Academic

MAT2L,
Mathematics,
Grade 10, Locally Developed

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**

MFM2P,
Foundations of Mathematics,
Grade 10, Applied

This course enables students to consolidate their understanding of relationships 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: Principles of Mathematics, Grade 9, Academic or Foundations of Mathematics, Grade 9, Applied**

MBF3C,
Foundations for College Mathematics,
Grade 11, College Preparation

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, analyzing, and evaluating data involving one and two variables. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. **Prerequisite: Foundations of Mathematics, Grade 10, Applied**

MCF3M,

Functions and Applications, Grade 11, University/College Preparation

This course introduces basic features of the function by extending students' experiences with the quadratic relations. It focuses on quadratic, trigonometric and exponential functions and their use in modeling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to financial and trigonometric applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Prerequisite: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied

MCR3U, Functions, Grade 11, University Preparation

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: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied**

Prerequisite: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied

MCR3UE, Functions, Grade 11, University Preparation, Enriched

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. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems, or other topics of interest to students.

Prerequisite: Principles of Mathematics, Grade 10, Academic

MEL3E, Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. **Prerequisite: Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied, or a ministry-approved locally developed Grade 10 mathematics course**

MAP4C, Foundations for College Mathematics, Grade 12, College Preparation

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze 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: Foundations for College Mathematics, Grade 11, College**

Preparation, or Functions and Applications, Grade 11, University/College Preparation

MCT4C,

Mathematics for College Technology, Grade 12, College Preparation

This course enables students to extend their knowledge of functions. Students will investigate and apply properties of polynomial, exponential, and trigonometric functions; continue to represent functions numerically, graphically, and algebraically; develop facility in simplifying expressions and solving equations; and solve problems that address applications of algebra, trigonometry, vectors, and geometry. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for a variety of college technology programs.

Prerequisite: Functions and Applications, Grade 11, University/College Preparation, or Functions, Grade 11, University Preparation

MCV4U,

Calculus and Vectors, Grade 12, University Preparation

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.

Note: The new Advanced Functions course (MHF4U) must be taken prior to or concurrently with Calculus and Vectors (MCV4U).

MDM4U,

Mathematics of Data Management, Grade 12, University Preparation

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing large amounts of information; solve problems involving probability and statistics; and carry out a culminating project 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**

MEL4E,

Mathematics for Work and Everyday Life, Grade 12, Workplace Preparation

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. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Prerequisite: Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation

MHF4U,

Advanced Functions, Grade 12, University Preparation

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: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation**

MHF4UE,
Advanced Functions,
Grade 12, University Preparation, Enriched

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. This course also extends students' mathematical knowledge through enrichment that may include mathematics contest work, open-ended problems, techniques for solving non-routine problems, or other topics of interest to students. **Prerequisite: Functions, Grade 11, University Preparation, or Mathematics for College Technology, Grade 12, College Preparation**

Native Studies

NDA3M,
Current Aboriginal Issues in Canada,
Grade 11, University/College Preparation

This course focuses on existing and emerging issues of national and regional importance of concern to Aboriginal peoples in Canada. Students will analyze diverse perspectives from a variety of sources such as media, academic

works and public opinion polls on events and developments related to land, community, governance, identity and culture. Using political thinking concepts and the political inquiry process students will explore their own and others' ideas, investigate an issue to determine what needs to change, why and appropriate problem-solving strategies. **Prerequisite: Grade 10 First Nations, Métis, and Inuit Peoples in Canada, Open, or Grade 10 Canadian History Since World War I, Academic or Applied**

NDW4M,
Issues of Indigenous Peoples in a Global Context,
Grade 12, University/College Preparation

This course examines historical and contemporary issues of concern to Indigenous peoples from a global perspective. Students will explore the richness, depth, and diversity of Indigenous cultures, traditions and knowledge. They will consider how diverse Indigenous communities persevere despite recent global environmental and economic trends. Topics such as identity, social justice, human rights and abuses, spirituality, resistance and protest for change will be investigated. **Prerequisite: Any Grade 11 First Nations, Métis and Inuit Studies or any Grade 11 University, University/College, or College Preparation course in Canadian and World Studies or any Grade 11 University, University/ College, or College Preparation course Social Science and Humanities.**

Science

SNC1D,
Science,
Grade 9, Academic

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to

sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

**SNC1DE,
Science,
Grade 9, Academic, Enriched**

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity. The regular topics in SNC1D are supplemented and enriched by a number of related activities to delve into cause and effect scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity.

**SNC1L,
Science,
Grade 9, Locally Developed**

This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the relationship between science, society, and the environment, to prepare students for success in everyday life, in the workplace, and in the Grade 11 Science Workplace Preparation course. Students explore a range of topics, including science in daily life, properties of common materials, life-sustaining processes in simple and complex organisms, and electrical circuits. 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.

**SNC1P,
Science,
Grade 9, Applied**

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science to everyday situations. They are also given opportunities to develop practical skills related to scientific investigation. Students will plan and conduct investigations into practical problems and issues related to the impact of human activity on ecosystems; the structure and properties of elements and compounds; space exploration and the components of the universe; and static and current electricity.

**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**

**SNC2DE,
Science,
Grade 10, Academic, Enriched**

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. The regular topics in SNC2D are supplemented and enriched by a number of related activities to delve into cause and effect scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity. **Prerequisite: Science, Grade 9, Academic or Applied**

**SNC2L,
Science,
Grade 10, Locally Developed**

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 Grade 11 Science Workplace Preparation course. Students explore a range of topics, including science in 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.

**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 Note: Grade 11 and 12 College Preparation courses in Science can be taken in either Grade 11 or 12**

**SBI3C,
Biology,
Grade 11, College Preparation**

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,
Biology,
Grade 11, University Preparation**

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**

**SBI3UE,
Biology,
Grade 11, University Preparation, Enriched**

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. The regular topics in SBI3U are supplemented and enriched by a number of related activities to delve into cause and effect scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity. **Prerequisite: Science, Grade 10, Academic**

SCH3U,
Chemistry,
Grade 11, University Preparation

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

SCH3UE,
Chemistry,
Grade 11, University Preparation, Enriched

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. The regular topics in SCH3U are supplemented and enriched by a number of related activities to delve into cause and effect scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity. **Prerequisite: Science, Grade 10, Academic**

SPH3U,
Physics,
Grade 11, University Preparation

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 analyze 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

SPH3UE,
Physics,
Grade 11, University Preparation, Enriched

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 analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment. The regular topics in SPH3U are supplemented and enriched by a number of related activities to delve into cause and effect scientific relationships as well as in-depth investigations that challenge students to investigate their own curiosity. **Prerequisite: Science, Grade 10, Academic**

SVN3E,
Environmental Science,
Grade 11, Workplace Preparation

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities

on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as the development of their scientific and environmental literacy.

Prerequisite: Science, Grade 9, Academic or Applied, or Grade 9 or 10 locally developed compulsory credit (LDCC) course in science

**SBI4U,
Biology,
Grade 12, University Preparation**

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: Biology, Grade 11, University Preparation**

**SCH4C,
Chemistry,
Grade 12, College Preparation**

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**

**SCH4U,
Chemistry,
Grade 12, University Preparation**

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**

**SPH4C,
Physics,
Grade 12, College Preparation**

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,
Physics,
Grade 12, University Preparation**

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 analyze, 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: Physics, Grade 11, University Preparation**

Social Sciences & Humanities

HFN10, Food and Nutrition, Grade 9, Open

This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs. Students will also explore the environmental impact of a variety of food choices at the local and global level. The course provides students with opportunities to develop food preparation skills and introduces them to the use of social science research methods in the area of food and nutrition.

HIF20, Exploring Family Studies, Grade 10, Open

This course explores, within the context of families, some of the fundamental challenges people face: how to meet basic needs; how to relate to others, how to manage resources, and how to become responsible members of society. Students will explore adolescent development and will have opportunities to develop interpersonal, decision-making, and practical skills related to daily life. They will learn about the diverse ways in which families function in Canada and will use research skills as they explore topics related to individual and family needs and resources. **(Will not be offered in 2017-2018. May be offered in 2018-2019)**

HNL20, Clothing, Grade 10, Open

This course introduces students to the world

of clothing. Students gain knowledge about clothing and demonstrate basic skills associated with various techniques and technologies used to create garments and accessories. Students will learn about the functions of clothing and accessories and what clothing communicates about the wearer. They will learn how to enhance their personal wardrobe by assessing garment quality, developing shopping strategies, and developing an understanding of the advantages and disadvantages of various retail formats. Students will develop research skills as they investigate topics related to clothing.

HFC3M, Food and Culture, Grade 11, College/University Preparation

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. They will demonstrate the ability to cook with ingredients and equipment from a variety of cultures, compare food-related etiquette in many countries and cultures, and explain how Canadian food choices and traditions have been influenced by other cultures. Students will develop practical skills and apply social science research methods while investigating foods and food practices from around the world.

HLS30, Housing and Home Design, Grade 11, Open

This course introduces students to a range of issues related to housing and home design. Students will learn about the needs that housing fulfills; housing 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. They will also learn skills used in researching and investigating living accommodations and housing.

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, 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.

HSP3U,
Introduction to Anthropology,
Psychology, and Sociology,
Grade 11, University Preparation

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, 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).**

HSP3C,
Introduction to Anthropology, Psychology,
and Sociology,
Grade 11, College Preparation

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.

HFA4U,
Nutrition and Health,
Grade 12, University Preparation

This course examines the relationships between food, energy balance, and nutritional status; the nutritional needs of individuals at different stages of life; and the role of nutrition in health and disease. Students will evaluate nutrition-related trends and will determine how food choices can promote food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and develop their social science research skills by investigating issues related to nutrition and health. **Prerequisite: Any university or university/ college preparation course in social sciences and humanities, English, or Canadian and world studies**

HFA4C,
Nutrition and Health,
Grade 12, College Preparation

This course focuses on the relationship between nutrition and health at different stages of life and on global issues related to food production. Students will investigate the role of nutrition in health and disease and assess strategies for promoting food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and refine their ability to use social science research and inquiry methods to investigate topics related to nutrition and health. **Prerequisite: Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies**

HSB4U,
Challenge and Change in Society,
Grade 12, University Preparation

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: Any university or university/college preparation course in Social Sciences and Humanities, English, or Canadian and World Studies.

Technological Studies

TIJ10,
Exploring Technologies,
Grade 9, Open, (Co-Ed)

This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and postsecondary education and training pathways leading to careers in technology-related fields.

TIJ10F,
Exploring Technologies,
Grade 9, Open, Female

This introductory course in technology will expose students to a variety of our technical studies through a series of rotations. This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will

begin to explore secondary and post secondary education and training pathways leading to careers in technology-related fields.

TXJ10,
Exploring Hairstyling and Aesthetics,
Grade 9, Open

This exploratory course introduces students to concepts and skills related to hairstyling and aesthetics, including hairstyles, manicures, nail art, and skin care. Students will investigate societal issues and environmental issues as well as the many different post secondary education and career paths that can be taken in the beauty and wellness industry.

TCJ20,
Construction Technology (Woodworking),
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.

TFJ20,
Hospitality and Tourism Technology,
(Culinary Arts)
Grade 10, Open

This course provides students with opportunities to explore different areas of hospitality and tourism, as reflected in the various sectors of the tourism industry, with an emphasis on food service. Students will study culinary techniques of food handling and preparation, health and safety standards, the use of tools and equipment, the origins of foods, and event planning, and will learn about

tourism attractions across Ontario. Students will develop an awareness of related environmental and societal issues and will explore secondary and post secondary pathways leading to careers in the tourism industry.

**TDJ20,
Technological Design (Design and Drafting),
Grade 10, Open**

This course provides students with opportunities to apply a design process to meet a variety of technological challenges. Students will research projects, create designs, build models and/ or prototypes, and assess products and/or processes using appropriate tools, techniques, and strategies. Student projects may include designs for homes, vehicles, bridges, robotic arms, clothing, or other products. Students will develop an awareness of environmental and societal issues related to technological design, and learn about secondary and post secondary education and training leading to careers in the field.

**TGJ20,
Communications Technology,
Grade 10, Open**

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and interactive new media and animation. Student projects may include computer-based activities such as creating videos, editing photos, working with audio, cartooning, developing animations, and designing webpages. Students will also develop an awareness of environmental and societal issues related to communications technology, and will explore secondary and post secondary education and training pathways and career opportunities in the various communications technology fields.

**TMJ20,
Manufacturing Technology,
(Machining and Welding),
Grade 10, Open**

This course introduces students to the manufacturing industry by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about technical drawing, properties and preparation of materials, and manufacturing techniques. Student projects may include a robotic challenge, a design challenge, or a fabrication project involving processes such as machining, welding, vacuum forming, or injection moulding. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary and post secondary pathways leading to careers in the industry.

**TTJ20,
Transportation Technology, (Auto),
Grade 10, Open**

This course 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 will develop an awareness of related environmental and societal issues and will explore secondary and post secondary pathways leading to careers in the transportation industry.

**TXJ20,
Hairstyling and Aesthetics,
Grade 10, Open**

This course presents hairstyling, make-up, and nail care techniques from a salon/spa perspective. Through a variety of school and community-based activities, students learn fundamental skills in hairstyling, giving manicures and facials and providing hair/scalp analyses, and treatments.

Students also consider related environmental and societal issues and explore secondary and post secondary pathways leading to careers in the field of hairstyling and aesthetics.

TCJ3E2, 2 Credits

Construction Technology (Building Construction),

Grade 11, Workplace Preparation

This course enables students to develop technical knowledge and skills related to carpentry, masonry, electrical systems, heating and cooling, and plumbing for residential construction. Students will gain hands-on experience using a variety of materials, processes, tools, and equipment to design, lay out, and build projects. They will create and read technical drawings, learn construction terminology, interpret building codes and regulations, and apply mathematical skills as they develop construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore post secondary career opportunities in the field.

TDJ3M,

Technological Design, (Design & Drafting), Grade 11, University/College Preparation

This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs, using working drawings and other communication methods to present their design ideas. They will develop an awareness of environmental, societal, and cultural issues related to technological design, and will explore career opportunities in the field, as well as the college and/or university program requirements for them.

TFJ3C,

Hospitality and Tourism, (Baking), Grade 11, College Preparation

Pastry and baking techniques should be emphasized. This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the

various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry.

TFR3C2, 2 Credits

Hospitality and Tourism, (Culinary Arts & Management),

Grade 11, College Preparation

This course enables students to develop or expand knowledge and skills related to hospitality and tourism, as reflected in the various sectors of the tourism industry. Students will learn about preparing and presenting food, evaluating facilities, controlling inventory, and marketing and managing events and activities, and will investigate customer service principles and the cultural and economic forces that drive tourism trends. Students will develop an awareness of health and safety standards, environmental and societal issues, and career opportunities in the tourism industry.

TGR3M,

Communications Technology, Grade 11, University/College Preparation

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 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 develop an awareness of related environmental and societal issues, and will explore college and university programs and career opportunities in the various communications technology fields. Working in groups, students will provide technical support required for annual Dramatic Productions and school-based assemblies.

TMJ3C2, 2 Credits

Manufacturing Technology, (Machining/Welding),

Grade 11, College Preparation

This course enables students to develop knowledge and skills through hands-on, project-based learning. Students will acquire design, fabrication, and problem-solving skills while using tools and equipment such as lathes, mills, welders, computer-aided machines, robots, and control systems. Students may have opportunities to obtain industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

TMJ3M,

Manufacturing Technology (Machining),

Grade 11, University/College Preparation

This course enables students to develop knowledge and skills related to design, process planning, control systems, and quality assurance. Students will use a broad range of tools and equipment and will combine modern manufacturing techniques and processes with computer-aided manufacturing as they develop critical decision-making, problem-solving, and project-management skills. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about pathways leading to careers in the industry.

TMW3E,

Manufacturing Technology, (Welding),

Grade 11, Workplace Preparation

This course focuses on welding and fabricating technology. This hands-on, project-based course is designed for students planning to enter an occupation or apprenticeship in manufacturing directly after graduation. Students will work on a variety of manufacturing projects, developing knowledge and skills in design, fabrication, and problem solving and using tools and equipment such as engine lathes, milling machines, and welding machines. In addition, students may have the opportunity

to acquire industry standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary school pathways that lead to careers in the industry.

TTA3C2, 2 Credits

Transportation Technology, (Auto Service),

Grade 11, College Preparation

This course 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. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation, and will learn about apprenticeship and college programs leading to careers in the transportation industry.

TTH3C2, 2 Credits

Transportation Technology, (Heavy Duty & Agricultural Equipment),

Grade 11, College Preparation

Farm equipment repair/service will be emphasized in this 2 credit course. This course 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. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation, and will learn about apprenticeship and college programs leading to careers in the transportation industry. **This course provides an emphasis on Auto Service**

TXJ3E,

Hairstyling and Aesthetics,

Grade 11, Workplace Preparation

This course enables students to develop knowledge and skills in cosmetology and offers a variety of applications that will equip

students to provide services for a diverse clientele. Students will identify trends in the hairstyling and aesthetics industry, learn about related health and safety laws, and expand their communication and interpersonal skills through interactions with peers and clients. Students will also consider environmental and societal issues related to the industry, and will acquire a more detailed knowledge of apprenticeships and direct-entry work positions.

TCJ4E2, 2 Credits

Construction Technology, (Building Construction),

Grade 12, Workplace Preparation

This course enables students to further develop technical knowledge and skills related to residential construction and to explore light commercial construction. Students will continue to gain hands-on experience using a variety of materials, processes, tools, and equipment; create and interpret construction drawings; and learn more about building design and project planning. They will expand their knowledge of terminology, codes and regulations, and health and safety standards related to residential and light commercial construction. Students will also expand their awareness of environmental and societal issues related to construction technology, and will explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation. **Prerequisite: Construction Technology, Grade 11, Workplace Preparation**

TDJ4M,

Technological Design (Design & Drafting), Grade 12, University/College Preparation

This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, and other communication methods to present their designs. Students will enhance their

problem-solving and communication skills, and will explore career opportunities and the post secondary education and training requirements for them. **Prerequisite: Technological Design, Grade 11, University/College Preparation**

TFJ4C,

Hospitality and Tourism, (Baking), Grade 12, College Preparation

Baking and pastry techniques will be emphasized. This course enables students to further develop knowledge and skills related to the various sectors of the tourism industry. Students will demonstrate advanced food preparation and presentation skills; increase health and wellness knowledge; develop tourism administration and management skills; design and implement a variety of events or activities; and investigate principles and procedures that contribute to high-quality customer service. Students will expand their awareness of health and safety issues, environmental and societal issues, and career opportunities in the tourism industry.

Prerequisite: Hospitality and Tourism, Grade 11, College Preparation

TFR4C2, 2 Credits

Hospitality and Tourism, (Culinary Arts & Management),

Grade 12, College Preparation

This course enables students to further develop knowledge and skills related to the various sectors of the tourism industry. Students will demonstrate advanced food preparation and presentation skills; increase health and wellness knowledge; develop tourism administration and management skills; design and implement a variety of events or activities; and investigate principles and procedures that contribute to high-quality customer service. Students will expand their awareness of health and safety issues, environmental and societal issues, and career opportunities in the tourism industry.

Prerequisite: Hospitality and Tourism, Grade 11, College Preparation

TMJ4C2, 2 Credits

Manufacturing Technology, (Machining & Welding),

Grade 12, College Preparation

This course enables students to further develop knowledge and skills related to machining, welding, print reading, computer numerical control (CNC), robotics, and design. Students will develop proficiency in using mechanical, pneumatic, electronic, and computer control systems in a project-based learning environment and may have opportunities to obtain industry-standard training and certification. Students will expand their awareness of environmental and societal issues and career opportunities in the manufacturing industry. **Prerequisite: Manufacturing Technology, Grade 11, College Preparation**

TMJ4M,

Manufacturing Technology (Machining), Grade 12, University/College Preparation

This course enables students to further develop knowledge and skills related to design, process planning, control systems, project management, quality assurance, and business operations. Students will use a broad range of tools and equipment, enhance their skills in computer aided design, and collaborate in managing a project. Students will critically analyse and solve complex problems involved in manufacturing products. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry. **Prerequisite: Manufacturing Engineering Technology, Grade 11, University/College Preparation**

TMW4E,

Manufacturing Technology, (Welding), Grade 12, Workplace Preparation

This project-driven, hands-on course builds on students' experiences in manufacturing technology. Students will further develop knowledge and skills related to the use of engine lathes, milling machines, welding machines, and other related tools and equipment as they design and fabricate

solutions to a variety of technological challenges in manufacturing. Students may have opportunities to acquire industry-standard training and certification. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry. Focus will be on welding and fabrication. **Prerequisite: Manufacturing Technology, Grade 11, Workplace Preparation**

TTA4C2, 2 Credits

Transportation Technology, (Auto Service), Grade 12, College Preparation

This course 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. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of apprenticeship and college programs leading to careers in the transportation industry. **Prerequisite: Transportation Technology, College Preparation, Grade 11. This course provides an emphasis on Auto Service**

TTH4C2, 2 Credits

Transportation Technology (Heavy Duty & Agricultural Equipment), Grade 12, College Preparation

Farm equipment repair/service will be the emphasis for this 2 credit course. This course 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. Students will expand their awareness of environmental and societal issues related to transportation

and their knowledge of apprenticeship and college programs leading to careers in the transportation industry. **Prerequisite: Transportation Technology, College Preparation, Grade 11. This course provides an emphasis on Auto Service**

TXA4E2, 2 Credits

Hairstyling and Aesthetics (Aesthetics), Grade 12, Workplace Preparation

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Working in a salon/spa team environment, students strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students will also expand their understanding of environmental and societal issues and their knowledge of post secondary destinations in the hairstyling and aesthetics industry. This course is designed for students who are interested in all aspects of the cosmetology industry with an emphasis on aesthetics. **Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation**

TXJ4E2, 2 Credits

Hairstyling and Aesthetics (Hairstyling), Grade 12, Workplace Preparation

This course enables students to develop increased proficiency in a wide range of hairstyling and aesthetics services. Working in a salon/spa team environment, students strengthen their fundamental cosmetology skills and develop an understanding of common business practices and strategies in the salon/spa industry. Students will also expand their understanding of environmental and societal issues and their knowledge of post secondary destinations in the hairstyling and aesthetics industry. This course is designed for students who are interested in all aspects of the cosmetology industry with an emphasis on aesthetics. **Prerequisite: Hairstyling and Aesthetics, Grade 11, Workplace Preparation**

Apprenticeship Pathway

Eden Lalonde



The excellent Technological Education programs at Stratford Northwestern have provided Eden with amazing opportunities and have guided her to the apprenticeship career pathway. Eden was introduced to careers in the manufacturing sector by her grade nine teacher, Mr. Scheerer. By grade 10 she knew that she wanted to work in this field. Each year, she has enjoyed the Manufacturing courses that she has taken and she has appreciated Mr. Colling's knowledge and his ability to challenge her to become a better worker.

As a result of a job shadowing placement during his class, she was hired as a summer employee at a local industrial company as a Millwright. As a student in the OYAP - Ontario Youth Apprenticeship Program, she has started her welding apprenticeship this school year with training in the evenings with the Technical Training Group and she will experience more hands-on learning with a co-op placement next semester. This unique program will allow her to put her skills to work in a real world setting and at the same time start earning hours towards becoming a welder. Always interested in learning, Eden plans to complete an apprenticeship as a Millwright after she becomes a licensed welder.

Eden is a well-rounded student. She excels academically and still has time to fit in numerous school activities. Hockey is one of her passions. She plays for both the city and as well as her school hockey team. She has been a valuable member of our school's swim team throughout her years, as well as a member of the track and field team. As a member of the Global Studies club, she experienced a trip of a lifetime to Switzerland and Italy. As she looks forward to her future beyond high school, she states that she will look back fondly as her time as a Huskie, especially the many friends she has made and the amazing teachers she has encountered. Eden will be a welcomed addition to the workers in the skilled trades.

University Pathway

Tylor Sauve



Tylor has set his sights on the stars as he looks forward to life after high school. He is passionate about astronomy and physics and hopes someday to make a contribution to the scientific community. At university next fall, he plans to study Astronomy at the University of Waterloo

Tylor speaks fondly of the teachers he has had throughout high school. They have helped him to discover his strengths and challenged him to be a critical thinker. According to Tylor, two of his teachers have been particularly influential. The first is Mrs. Stone, his physics teacher, who like Tylor has a passion for

physics, and who has encouraged him to pursue this field of study. The second is Canada World Studies teacher, Mrs. Ritsma, who has helped him to become a more confident student and who helped nurture a new found interest in History.

Beyond the classroom, Tylor has to develop numerous skills through the clubs he has joined. He is an active member of Student Council and he was elected as one of this year's co-presidents. Tylor has also competed as a member of the school's, Reach for the Top team. His radio quality voice has shared school highlights with the student body mornings on Huskie A. M. He has also enjoyed taking part in numerous enrichment opportunities throughout his four years which have helped to expand his knowledge beyond the regular classroom.

Tylor feels well prepared to succeed at university because of the strong academic education he received at Stratford Northwestern. He will leave high school with many great memories of his time as a Huskie, especially those of the great friendships he has made and the teachers who have had a positive impact on his academic life.