Sec 4 Course Descriptions 2025-26
ARTS EDUCATION OPTION (COMPULSORY)

Art

Objective: Students should be able to acquire knowledge of the elements of art and to apply techniques. The compulsory program provides students with the opportunity to expand and diversify the learning acquired in the cycle 1 and cycle 2 programs.
Like the secondary cycle one visual arts program, the cycle two program is based on three complementary competencies.

- Creates personal images
- Creates media images
- Appreciates images

Drama

This second-year course in Drama will continue to develop students' understanding of and appreciation for the dramatic arts. The emphasis of the course is on the creation, performance, and appreciation of a variety of dramatic works. The course is experiential in nature and requires active student participation and cooperative group work on a daily basis. Students that choose this Arts option should be comfortable with stage performance.

The course will explore new topics in Drama and further develop students' knowledge and skills in dramatic acting, musical theatre, parody, script writing, interpretation, and production, play study, staging and stage directions and critiquing live theatre. Students will also gain experience in stage management and small theatre production. Students should be aware that small theatre productions put on by this class will require occasional rehearsals outside of class time. New technical theatre elements will be explored at the end of the year in preparation for secondary 5. Course work is equally divided between written work (planning and reflection), rehearsal and performance. A developmental workbook that tracks a student's artistic development is an important learning tool used throughout the three-year Drama program.

Music - Band **Pre-requisite Sec III music or audition

At this level, students continue to develop musicianship through progressively challenging band arrangements and small ensemble work. Traditionally, the secondary 4 class provides the musical entertainment for the graduation ceremony. Each student will be provided with a musical instrument. Digital technologies, including You Tube and Edmodo, are used to help students explore composition, improvisation, and music history.

Music – Introduction to Guitar

This course provides students an opportunity to explore the fundamentals of guitar performance, reading traditional notation, understanding the musical concepts of melody, harmony, rhythm and form, and to develop a deeper appreciation for all styles of music and music as art. Each student will be provided with a guitar to play in class. A variety of digital technologies including eMedia

Guitar tm, YouTube and Ultimate Guitar are used to facilitate practice both at school and at home. No previous experience necessary.

Music - Strings Orchestra **Pre-requisite Sec. III Strings or audition

This is a full-year elective program, beginning in Secondary I, which extends to the five grade levels. The program consists of the following ensembles: * Junior String Orchestra * Honors Orchestra * 2 Intermediate String Orchestras * Senior String Orchestra * Symphony Orchestra. The Music courses are performance-based. Students learn to play a string orchestra instrument (violin, viola, cello, upright bass), focusing on a western musical repertoire. Specifically, the course work is divided into three competencies: Music Performance (40%) is the foundation of the program, where students from any background, regardless of previous musical experience, learn to play an instrument and perform both alone and in an ensemble. Music Creation (30%) explores the theoretical structures of music, including music notation, reading skills, and basic composition. Music Appreciation (30%) includes various topics, from learning concert and rehearsal etiquette to critical listening skills.

SEC 4 – ELECTIVE COURSE DESCRIPTIONS
Options

Cooking & Nutrition

Cooking & Nutrition is designed to help improve a student's knowledge, comfort and independence in the kitchen.

The topics covered include:

- how to read recipes
- food & kitchen safety
- proper care and use of a wide variety of equipment
- food preparation and cooking/baking terms
- skills and techniques
- food borne illnesses
- nutrition and the Canada's Food Guide
- how to read food labels
- alternate diets and health issues
- body image
- interesting facts about ingredients and food
- food production/farming
- budgeting
- meal planning

We cook approximately once a week. The majority of work is done in class with minimal homework. No experience necessary.

Fitness, Health and Weight Training

This course is an introduction to fitness. Various areas of fitness will be studied through practical applications (weight training, aerobic fitness). Students will be required to participate in "workouts" during all classes.

Woodworking

Students will be introduced to various phases of architectural drafting and planning, site preparation, building components and terminology, construction methods, materials and costing, model construction and related trades and occupations. Projects in Wood can range in difficulty from a simple box to an elaborate carving. Projects will often be conceived in one class and completed in the other.

Secondary 4 Math

Cultural, Social & Technical Math (CST)

This option provides students with tools that help them to increase their capacity for analysis, to consider different possibilities, to make informed decisions, to support their reasoning and to take a position with respect to various issues.

Consolidating and integrating knowledge in a variety of activities:

- hands-on activities
- exploration activities
- games
- research
- presentations
- debates
- analysis of media

Interpreting reality as well as making generalizations, predictions, decisions.

Carrying out concrete, practical activities

Using technology to represent or process large amounts of data or relieve tedium.

Arithmetic and Algebra

- Algebraic expression (first-degree inequality in 2 variables)
- Relation, function and inverse (real functions)
- System (first-degree equations in 2 variables)

Probability and Statistics

- Subjective probability
- Fairness (odds, mathematical expectation)
- One-variable distribution (percentile, mean deviation)
- Two-variable distribution (correlation coefficient, regression line)

Geometry and Graphs

- Analytic geometry (distance, slope, point of division, parallel & perpendicular lines)
- Measurement (sine, cosine, tangent, sine law & Hero's formula)

Technical & Scientific Math (TS)

Students will continue to explore various topics in the T&S option in order to better understand its focus, to use manual skills and intellectual abilities associated, among other things, with the operation of technical instruments, and to make connections between mathematics and different occupations.

- Comparing solutions with peers, considering various points of view
- Exercising critical judgment when validating conjectures
- Looking for causes of problems, mistakes, anomalies in solutions
- Making recommendations with the view to taking corrective measures or making actions
- more efficient.

Arithmetic and Algebra

- Expressions (real numbers, radicals, base 2 and base 10 powers)
- First-degree inequality in 2 variables
- Second-degree polynomial, exponential, greatest integer, periodic, step, piecewise
- Parameter
- System of first-degree equations in 2 variables

Probability and Statistics

- Conditional probability
- Odds, mathematical expectation
- One-variable distribution (mean deviation, standard deviation)
- Two-variable distribution (correlation coefficient, regression line, curves)

Geometry and Graphs

- Analytic geometry (distance, coordinates, slope, parallel and perpendicular lines,
- perpendicular bisectors)
- Metric and trigonometric relations in right triangles

Science Math (SN)

Students become familiar with new networks of concepts and processes. Their capacity for abstract thinking enables them to make a variety of connections among the different branches of mathematics. They make more formal use of symbols, rules and conventions in their work and are required to construct proofs.

This option emphasizes the modeling process. Students analyze a situation, a phenomenon or a behavior and notice related patterns or trends. They interpolate, extrapolate and generalize. Students encounter situations that require them to use their knowledge of math and other subject areas. They work with purely mathematical contexts while continuing to deal with concrete situations, particularly of a scientific nature.

Arithmetic and Algebra

- Algebraic identity, second-degree equation, inequality in one variable
- Step function, second-degree polynomial function
- Parameter
- System of first-degree equations in 2 variables
- System of a first-degree equation and a second-degree equation in 2 variables

Probability and Statistics

- Two-variable distribution (correlation coefficient, regression line)
- Geometry and Graphs
- •Analytic Geometry (straight lines, distance)
- Metric and trigonometric relations in triangles (sine, cosine, tangent, sine and cosine laws)

Secondary 4 Science

GENERAL Science and Technology

GENERAL Science and Technology is a core course for Secondary IV students and meets the graduation requirements to obtain a high school diploma. It is designed for students who DO NOT wish to take any science options in Secondary V (i.e.: Chemistry and Physics). It is offered 6 periods every 6 days.

The course involves hands-on, inquiry-based learning to develop problem solving, to emphasize the application of science knowledge, and to teach communication using scientific and technological language.

The theme of the secondary 4 Science & Technology program is the environment. Students will investigate concepts from the Living, Material and Technological Worlds as well as Earth and Space in order to gain a better understanding of scientific phenomena, technological achievements and issues related to such topics as climate change, the energy challenge, drinking water and deforestation.

In this course, students will become familiar with standard laboratory practices and be encouraged to apply theoretical concepts in a practical way through lab work.

APPLIED Science and Technology

APPLIED Science and Technology is a core course for Secondary IV students and meets the graduation requirements to obtain a high school diploma. It is designed for students who DO NOT wish to take any science options in Secondary V (i.e.: Chemistry and Physics). It is offered 6 periods every 6 days.

The course involves hands-on, inquiry-based learning to develop problem solving skills, to emphasize the application of science knowledge, and to teach communication using scientific and technological language.

The secondary 4 Applied Science & Technology program focuses on the analysis of technical applications. Students will investigate concepts from the Living, Material and Technological Worlds as well as Earth and Space in order to learn about scientific phenomena and technological achievements related to such fields as energy and transportation technologies. In doing so, students will develop a deeper understanding of how things work and will be able to deal more effectively with technical objects, systems, products and processes in the world around them.

In this course, students will become familiar with standard laboratory practices and be encouraged to apply theoretical concepts in a practical way through lab work.

ADVANCED Science and Technology (Students must select the General ***or*** Applied Pathway)

ADVANCED Science and Technology is a course for secondary IV students who wish to take the Physics and Chemistry science options in Secondary V. It is offered 8 periods every 6 days.

This advanced course covers the required content that is given in the General and Applied Science and Technology courses (see above) and meets graduation requirements in order to obtain a high school diploma. In addition, this course may cover the basic topics in greater detail and will include additional topics to help prepare students for advanced science students in Secondary V. As with the core courses offered, topics fall under four major areas of study:

- The material world
- The living world
- Earth and space and
- The technological world.

Some additional topics might focus on the impact of science on the environment, and may include areas such as issues of energy, residual materials and food production, as well as others.

In this course, students will become familiar with standard laboratory practices and be encouraged to apply theoretical concepts in a practical way through lab work.

Advanced APPLIED Science is also offered in French. Placement is determined by the Administration in consultation with teachers and based on final results in Secondary 3.