Sec 5 Course Descriptions 2025-26
ARTS EDUCATION OPTION (COMPULSORY)

Art

During this course, students will review all basic skills of drawing and painting and will be introduced to sculpture while creating artwork that will be integrated into our school, such as murals and exhibitions. Students will be given the tools and the opportunity to explore different ways to create strong and powerful images and develop their own style. This class might include field trips such as going to museums and art galleries. Projects and assignments completed in this class will provide what is needed for the portfolio requirements for admission into certain programs at CEGEP.

Drama

This course in Drama will continue to develop students' understanding of and appreciation for dramatic works and the larger world of performing 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 end of year drama presentation is performed in front of a public audience.

The course will explore new topics in Drama and further develop students' skills in acting methods, the application of dramatic modes, clowning and circus arts, adaptation of dramatic texts, play study, monologues, script writing and play production. Students will gain experience in stage management, technical theatre production, directing and set and costume design. Students should be aware that small theatre productions put on by this class will require occasional rehearsals outside of class time. Throughout the course students are encouraged to use their knowledge and skills in all areas of the arts such as dance, choreography, singing, live music, design and visual art and creatively apply these skills in their dramatic performances. Viewing live theatre plays a valuable role in enriching the Drama curriculum and developing students' artistic awareness and appreciation for the performing arts. During the year, students will receive course credit by attending and critiquing one play per term.

Music - Band **Prerequisite Sec II music or audition

At this level, students continue to develop musicianship through progressively challenging band arrangements and small ensemble work. Emphasis is placed on exploring different musical forms and styles as well as on developing musicality in playing. Each student will be provided with a musical instrument. Digital technologies, including YouTube 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

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 5 ELECTIVE COURSE DESCRIPTIONS
Options

Biology (Required for IB students who do NOT select Chemistry and Physics)

Did you enjoy grade 9 science and wish that you could learn more biology? This course will focus on the biological processes at work within a variety of organisms including bacteria, plants, animals and humans. Topics to be explored include the following:

- Cells (tissues, organs, systems, structure and function; factors affecting human health
- physiology; vaccination)
- Organisms (habitat, ecosystems, interdependency, unity and diversity in life forms; energy
- transfer and cycles [including nutrient, carbon, nitrogen]; classification)
- Processes (photosynthesis, cell respiration, aerobic and anaerobic, word and chemical
- equations)
- Metabolism (nutrition, digestion, biochemistry and enzymes; movement and transport,
- diffusion; osmosis; gas exchange; circulation, transpiration and translocation; homeostasis)
- Evolution (life cycles, natural selection, cell division, mitosis, meiosis, reproduction
- Biodiversity, inheritance and variation, DNA and genetics)
- Interactions with environment (tropism, senses, nervous system, receptors and hormones)
- Interactions between organisms (pathogens/parasites, predator/prey, food chains & webs
- competition, speciation and extinction)
- Human interactions with environments (human influences, habitat change or destruction,
- pollution/ conservation; overexploitation, mitigation of adverse effects)
- Biotechnology (genetic modification, cloning; ethical implications, genome mapping and
- application, 3D tissue and organ printing)

Canadian Law

Canadian Law will examine issues that affect us everyday. This course will be divided into 5 units:

- An Introduction to Law
- Criminal Law
- Tort and Dispute Resolution
- Family Law
- Contract Law

By the end of this course students will have a better understanding of Canadian Law and appreciate the responsibilities we have towards each other.

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 & Weight Training

This course introduces the students to the field of exercise science as a discipline. This course is a practical application of various training systems. There will be some theory in the classroom.

Students will participate in:

- Aerobic Training – 4 to 6 week run program with a written project
- Strength training – endurance training, strength training, sport specific training, core workout
- Agility training

Intro to Business

This course is intended for students who are considering entering Commerce or Business programs. It will give a general overview of some of the business courses being offered at CEGEP and University. This is a project-based course that will focus on 6 different areas of business and will give the student a 'taste' of what will be covered in most Commerce/Business programs.

The course will spend approximately a month on each of the following areas of business:

- Accounting
- Finance
- Marketing
- Economics
- Management and Entrepreneurship

The course will offer a combination of lectures, guest speakers and student led presentations.

Intro to Social Sciences

This course is intended for students who wish to pursue a path in Social Science at the CEGEP level. Each Term will examine a different area of study, with students learning about and exploring the basic principles of Psychology, Sociology, Photography, and Journalism.

The course will be a mix of theory and current events, and will be based on lectures, guest speakers, and student-led research projects and presentations.

Leadership

This course draws from leadership theory and builds an understanding of how working groups function. Students analyze group behavior, focusing on problem-solving techniques and conflict resolution upon event reflection.

Students choose projects (with a focus on local community) to organize as a group, giving them an opportunity to practice their leadership and group building techniques.

Team meetings are highlighted and leadership in groups is practiced as students develop group projects. Students will also look at digital media, design and citizenship.

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 5 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

- System of first-degree inequalities in 2 variables

Probability and Statistics

- Conditional probability

Geometry and Graphs

- Degree, distance, path, circuit
- Graph: directed, weighted

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

- Second-degree polynomial, rational, sinusoidal
- Parameter
- Operations on functions
- System of first-degree inequalities in 2 variables
- System of equations and inequalities involving various functional models

Geometry and Graphs

- Geometric locus, relative position (plane loci involving lines or circles only, and conics)
- Standard unit circle
- Vector (resultant and projection)
- Metric relations in circles and trigonometric relations in triangles (sine and cosine laws)

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

- Real numbers (absolute value, radicals, exponents and logarithms)
- Real function (absolute value, square root, rational, exponential, logarithmic, sinusoidal,
- tangent, piecewise)
- Operations on functions
- System of first-degree inequalities in 2 variables
- System of second-degree equations (in relation to conics)

Geometry and Graphs

- Standard unit circle and trigonometric identities
- Vector
- Conics (parabola, circle, ellipse and hyperbola centered at the origin)

Contemporary World (COMPULSORY COURSE FOR ALL SEC V STUDENTS)

This is a compulsory course that requires students to examine current issues that we face as a society today. The course encourages students to develop critical-thinking and perspective-taking skills, as well as research skills, through a variety of processes as outlined below:

Interpret contemporary world problems

- Define the problem from a multicultural perspective
- Analyze the problem through the evaluation of causes and consequences, identifying
- other points of view, and recognizing power relations
- Consider the problem as a whole by evaluating its scale and global nature
- Critically assess one's own perspective and problem-solving

Take a position on a contemporary world issue

- Identify values and interests and how they are similar and different
- Consider the media influence on opinions regarding the issue
- Debate the issue from many perspectives
- Consider opportunities for social action
- Evaluate the process of taking a position

Students will draw on a variety of subject areas related to Social Studies, History, Geography, Politics and Economics. Specific themes that will be addressed might include interdependence, globalization, environment, population, wealth, tension, conflict and power.

SCIENCE PACKAGE

Chemistry **Prerequisite: ***must*** pass Math 4TS ***or*** Math 4SN ***and*** Sec. 4 Advanced Science

It is a laboratory-oriented program in which students construct their own knowledge of chemical phenomena from the observations and experiences gained in the laboratory.

The five modules of the program are:

- Research with a chemical phenomenon,
- Gasses and their applications,
- Energy in chemical reactions
- Rate of chemical reactions and
- Equilibrium in chemical reactions,

The inter-relationship of science, technology and society is stressed throughout the program.

Physics **Prerequisite: ***must*** pass Math 4TS ***or*** Math 4SN ***and*** Sec. 4 Advanced Science

Laboratory-oriented program in which students construct their own knowledge of physical phenomena from observations and experiences gained in the laboratory.

The three modules of the program are:

- Optics - the behavior of light, including reflection, refraction, lenses, mirrors & images,
- Optical Devices - experimental research,
- Mechanics - motion and forces.

Financial Literacy

Financial education prepares students to manage their personal finances and helps them make informed choices. It promotes responsible behavior and the development of sound judgment. The Financial Education program aims to help students develop critical judgment in managing their personal finances and to develop the confidence and self-knowledge needed for financial wellbeing.