

# ***Beaconsfield High School***



## **Course Selection Handbook 2018-2019**

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**BEACONSFIELD HIGH SCHOOL COURSE SELECTION HANDBOOK  
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Dear Parent(s),

This Course Selection Handbook has been prepared to enable you to help your son/daughter choose his/her program/courses for next year.

**The Course Descriptions** explain the nature of each course and if any prerequisites are required.

These brief explanations provide a greater understanding of a given subject's content.

If you would like further information, please do not hesitate to consult with an administrator, your child's teacher, or our school guidance counselor.



**Beaconsfield High School**  
**Cycle 1 Programs 2018-2019**

**1. BHS Bilingual Program**

**Courses Taught in English:**

English Language Arts  
Mathematics  
Science & Technology  
Geography/History  
Ethics & Religious Cultures Arts Option

**Courses Taught in French:**

Français de base

The **Bilingual Program** will develop the skills necessary to function efficiently in French. Included are a variety of communication skills, such as vocabulary, reading, writing, listening and speaking activities.

**2. BHS French Immersion Program**

**Courses Taught in English:**

English Language Arts  
Mathematics  
Science & Technology  
Ethics & Religious Culture  
Arts Option

**Courses Taught in French:**

Français de base ou enrichi  
Géographie/Histoire

The **French Immersion Program** is for students who are proficient in French and will continue to develop the skills necessary to function efficiently in French. Included are a variety of communication skills, such as vocabulary, reading, writing, listening and speaking activities.

**3. BHS Enriched Program**

**Courses Taught in English:**

English Language Arts  
Mathematics  
Science & Technology  
Ethics & Religious Culture  
Arts Option

**Courses Taught in French:**

Français enrichi  
Géographie/Histoire

The **Enriched Program** is for students who communicate in French with ease and confidence and want to acquire a level of autonomy close to bilingualism. Students are required to comprehend, interact and write complex texts. .

**4. BHS Défi Français**

**Courses Taught in English:**

English Language Arts  
Mathematics  
Arts Option

**Courses Taught in French:**

Français langue d'enseignement  
Géographie/Histoire  
Science et Technologie  
Éthique et culture religieuse

The **Défi Français Program** is a course for students who interact independently in French. They will develop their communication skills, creative and critical thinking skills by interacting with a variety of written and oral texts.

## **CYCLE I ENRICHED PROGRAMS**

These programs are designed for students who are highly motivated and independent learners who have the ability to work at an accelerated pace.

### **SECONDARY 1**

The Secondary One Enriched Program incorporates the integration, enrichment and acceleration of the five academic subjects: English, French, Mathematics, Science and Social Studies. The use of laptop computers and technology instruction in the classroom creates a relevant 21st-century digital learning environment that promotes a high expectation for success. An emphasis on encouraging digital citizenship, exploration & innovation, while respecting individual learning styles, is at the heart of the program.

Admission to our Secondary One Enriched Program or the Défi Français Program is dependent on the results of the entrance examinations. Consultation with elementary teachers may also take place.

Please note: the Défi Français Program is for students who are highly proficient in both the written and oral French language.

### **SECONDARY 2**

At the Secondary Two level, continuation in the Enriched Program or the Défi Français Program is dependent on maintaining an average of 75% as well as demonstrating appropriate behaviour and an acceptable work ethic.

Students wishing to enter the Secondary Two Enriched Program will only be considered based on teacher recommendations and achievement in all Secondary One subjects. If space permits, a qualified student in the Immersion or Bilingual Program may be offered a place in the Enriched Program. This placement is based on teacher recommendations, however, the final decision is made by the administration.

# **COURSE DESCRIPTIONS**

## **SECONDARY 1 COMPULSORY COURSES**

### **ENGLISH – SECONDARY 1**

The English Language Arts program developed by the government and our school board emphasizes the processes involved in listening, speaking, reading, and writing. Objectives are formulated based upon the close relationship between language skills and the cognitive thinking process.

The high school level English curriculum is an integrated pedagogy that allows a student to continually expand his or her expressive and receptive language and vocabulary.

The emphasis in Cycle 1 is placed upon:

- Oral Communication – both individually and in groups
- Written – for self-expression and analysis
- Reading – for content, comprehension and pleasure
- Media Communication – listening, viewing and reporting are incorporated to increase English language skills

The English Language Arts Program encourages student success through the use of laptop computers. An emphasis is placed on digital exploration while respecting the student's learning style.

### **FRENCH AS A SECOND LANGUAGE BILINGUAL FRENCH – SECONDARY 1**

This course develops reading, writing, listening and speaking skills. By using oral and written messages of general interest and common usage, students will learn to:

- speak on subjects related to their experience and knowledge
- write on topics related to their physical and social environment
- use various models in their oral and written productions
- use appropriate grammar and vocabulary in their oral and written production

### **IMMERSION FRENCH - SECONDARY 1**

This program aims to reinforce and develop oral comprehension and communicative language skills in daily class situations. Added to these skills is a thorough systematic study of certain structures of the French language. A greater emphasis is placed on using the tools/techniques of grammar and syntax and on vocabulary building.

### **ENRICHED FRENCH - DÉFI FRANÇAIS – SECONDARY 1**

Greater emphasis on French reading and writing, two additional courses are taught in French – Science et Technologie and Éthique et Culture Religieuse.

## **MATHEMATICS – SECONDARY 1**

The Secondary 1 Math program at Beaconsfield High School emphasizes the development of the 2 competencies set forth by the Ministère de l'Éducation.

1. Solves a situational problem.
2. Uses mathematical reasoning.

Working collaboratively, using hands-on manipulatives and technology based apps. Secondary 1 Math students at BHS will follow a program of study that can be broken down into the following topics:

- **Arithmetic:** Working with natural numbers, integers, fractions, and decimals.
- **Geometry:** Working with 2D shapes, angles, linear measurements and geometric transformations.
- **Statistics:** Constructing and analyzing graphs, frequency tables and other statistical representations.
- **Probability:** Studying random experiments and calculating the theoretical and experimental probability of events.
- **Algebra:** Understanding, constructing, evaluating and solving algebraic equations.

## **SCIENCE & TECHNOLOGY - SECONDARY 1**

The curriculum is designed to be a student-based hands-on program. Students will find solutions to scientific or technological problems, make use of knowledge about science and technology, and communicate using scientific and technological language and symbols. The curriculum is theme-based and integrates concepts from the four worlds: living, material, earth and space and technological. There will be projects and experiments based on learning through the use of technology and students will develop various methods for analyzing problems. When possible the program will be enriched with workshops, field trips and guest speakers.

For students in the Défi Français Program Science and Technology is taught in French.

## **GEOGRAPHY/HISTORY or GÉOGRAPHIE/HISTOIRE – SECONDARY 1**

The geography component of this course introduces basic concepts and skills in geography. Various territories will be studied including: cities, agricultural territories, and protected territories. Students will work towards developing the following three competencies:

1. Understanding the organization of a territory.
2. Interpreting territorial issues.
3. Constructing his/her consciousness of global citizenship.

The history component of this course traces the evolution of western society, from the Stone Age to the Middle Ages. Study focuses on daily life as well as major

## **GEOGRAPHY/HISTORY or GÉOGRAPHIE/HISTOIRE – SECONDARY 1 (CONT'D)**

achievements of various civilizations. In this course students will work towards developing the following three competencies:

1. Examining social phenomena from a historical perspective.
2. Interpreting social phenomena using the historical method.
3. Constructing his/her consciousness of citizenship through the study of history.

## **ETHICS AND RELIGIOUS CULTURE or ÉTHIQUE & CULTURE RELIGIEUSE - SECONDARY 1**

The recognition of others and the pursuit of the common good are the two main objectives of the program. They are interdependent and common to both ethics and religious culture. By bringing together ethics and religious culture into a single program, students will be encouraged to engage in critical reflection on ethical questions and to understand the phenomenon of religion by practicing dialogue, in a spirit of openness.

Through dialogue, students are invited to engage in reflection, interact with others and develop a point of view.

The ERC program focuses on the development of two competencies which must be developed in an integrated manner, one with the other, as opposed to in a linear manner:

- Reflects on ethical questions and practices dialogue
- Demonstrates an understanding of the phenomenon of religion and practices dialogue

The ERC program also takes into account secular expressions and representations of the world and of human beings, which seek to define the meaning and value of human experience outside the realm of religious beliefs and affiliation.

Students will have the opportunity to analyze forms of religious expressions, make connections between these expressions and the social and cultural environment, and examine various ways of thinking, being and acting.

## **PHYSICAL EDUCATION – SECONDARY 1**

Physical Education is designed to teach skills, knowledge, sportsmanship and safety through an exposure to a wide variety of sports and recreational activities. The students will establish a degree of physical fitness, a respect for a healthy body and mind, and an appreciation for lifetime sports.

Physical Education at the Secondary 1 level focuses on the development of skills and on an understanding of team and individual sports with special emphasis placed on participation, sportsmanship, cooperation, and personal fitness. A Beaconsfield High School physical education uniform is compulsory.

Following the MELS guidelines, by the end of Secondary school, students will have fulfilled the three competencies designed specifically for the physical education program.

## **PHYSICAL EDUCATION – SECONDARY 1 (CONT'D)**

### **Competency 1: *To perform movement skills in different physical activity settings.***

- a) Analyzes the situation according to the requirements of the setting.
- b) Performs movement skills in different constraints.
- c) Evaluates own motor efficiency and process in the light of the goal pursued.

### **Competency 2: *To interact with others in different physical activity settings.***

- a) Cooperates in developing a plan of action.
- b) Participates in carrying out the plan of action.
- c) Cooperates in evaluating the plan of action.

### **Competency 3: *To adopt a healthy, active lifestyle.***

- a) Analyzes the impact of certain personal lifestyle habits on his/her own health and well being.
- b) Develops a plan designed to change some personal lifestyle habits.
- c) Carries out the plan.
- d) Evaluates own process and lifestyle habits.

## **SECONDARY 1 OPTIONS**

### **ARTS OPTIONS – SECONDARY 1**

(Please note that the Arts option chosen in Secondary 1 will continue at the Secondary 2 level, as required by the Ministry of Education.)

#### **VISUAL ARTS – SECONDARY 1**

**Aims of the course:** The course teaches the student the language of visual art, the use of specific artistic techniques, how to use his/her abilities, how to use imagination and creativity and understand the nature of aesthetic experience.

**Course Content:** The course is divided into the following subject-specific competencies that can be interrelated or touched upon independently.

**Creates Personal/Media Images:**

The students will explore ideas and experiment with materials in order to create a visual art work or a media production. Through this process he/she will learn the elements of visual art language and share his/her experience of visual creation.

**Appreciates Works of Art and cultural objects from the world’s artistic heritage:**

The student will examine images of art to identify the components of an artistic production as well as the symbolic and expressive elements that move them.

#### **DANCE - SECONDARY 1**

Dance is a two year course that emphasizes the joys of artistic dance and inter-disciplinary learning in a relaxed environment conducive to creative exploration and development. Dance will provide a global perspective by allowing students to experience a variety of dance styles and techniques including contemporary, stomp, Latin, Broadway and Hip Hop. Through their own creative intention, the student will learn to adapt movement sequences, explore elements of dance language and structure, compose dances and present their compositions in class either individually or in a group setting. All of their hard work throughout the year will culminate in a charity dance show to be held at the end of the school year.

#### **DRAMA - SECONDARY 1**

The drama program at BHS allows for the development of acting abilities through voice-training, body movements and creative expression. Students will learn about plot development, improvisation, monologues, script study, short plays and much more. They will have the chance to create, perform and appreciate dramatic works.

## **MUSIC PROGRAM OVERVIEW**

Music is a full year elective program, beginning in Secondary 1, which extends to the five grade levels. The program consists of nine ensembles:

Sec. 1 Band	Sec. 5 Band
Sec. 2 Band	Senior Concert Band
Sec. 3 Band	Senior Jazz Band
Sec. 4 Band	Junior Jazz Band Competition Ensembles

### **Instruments provided by the school:**

Piccolo	Alto Sax	Trumpet	Percussion	Oboe
	Flute	Tenor Sax	Trombone	Orchestral
Timpani	Clarinet	Baritone Sax	Euphonium	Bass
Clarinet	French Horn	Tuba	Bassoon	

Music is a full year elective program, beginning in Secondary 1, which extends to the five grade levels. The program is based on band performance and all instruments are school-owned. Students are given the opportunity to join many extra-curricular ensembles such as concert band, jazz band and drumline. The department also offers outings to see and hear live performances by professional musicians. Students will have the possibility of participating in various music festivals in Canada and in the United States.

## **MUSIC – SECONDARY 1**

This course introduces the student to the basics of music techniques and musicianship through band performance and appreciation. This includes care of the instrument, correct posture and playing position, correct embouchure, tone production, breath control and fingerings. Basic music rudiments and rhythms are also a part of the objectives of this program. A variety of the instrumental musical styles are used to teach the student the above fundamentals. Throughout the students' musical experiences in the department, they will be given many performance opportunities. Absolutely no previous experience is necessary, however, students with previous experience will be equally challenged!

## **VISUAL ARTS: ROBOTICS**

Keep up with the future of innovation; a course where learning happens at light speed. Do you want to learn about Science, Technology, Engineering, Art and Math in a new way, while having fun doing a hands-on project? Then this is the course for you! Using Lego robotics you can push the limit of your imagination and problem solving skills. Show your creative side and your innovative side. This course will adapt to your experience using Lego robotics from beginner to advanced levels.

## **SECONDARY 2**

### **COMPULSORY COURSES**

#### **ENGLISH – SECONDARY 2**

The English Language Arts program developed by the government and our school board emphasizes the processes involved in listening, speaking, reading, and writing. Objectives are formulated based upon the close relationship between language skills and the cognitive thinking process.

The high school level English curriculum is an integrated pedagogy that allows a student to continually expand his or her expressive and receptive language and vocabulary.

The emphasis in Cycle 1 is placed upon:

- Oral Communication – both individually and in groups
- Written – for self-expression and analysis
- Reading – for content, comprehension and pleasure
- Media Communication – listening, viewing and reporting are incorporated to increase English language skills

#### **BILINGUAL FRENCH – SECONDARY 2**

This course develops reading, writing, listening and speaking skills. By using oral and written messages of general interest and common usage, students will learn to:

- speak on subjects related to their experience and knowledge
- write on topics related to their physical and social environment
- use various models in their oral and written productions
- use appropriate grammar and vocabulary in their oral and written productions.

#### **FRENCH IMMERSION - SECONDARY 2**

This program aims to reinforce and develop oral comprehension and communicative language skills in daily class situations. To these skills are added a thorough systematic study of certain structures of the French language. A greater emphasis is placed on using the tools/techniques of grammar and syntax and on vocabulary building. By the end of this course, students will be able to communicate, both conversationally and in writing.

#### **ENRICHED FRENCH – DÉFI FRANÇAIS - SECONDARY 2**

This is an enriched French course, similar to the Immersion Program, but with an added emphasis on French reading and writing at an accelerated pace. Two additional courses are taught in French – “Discovery” Science et Technologie and Éthiques et Culture Religieuse.

Continuation in the Enriched Défi Français program is dependent on a good work ethic, appropriate behaviour and an overall average of 80%.

## **MATHEMATICS – SECONDARY 2**

The Secondary 2 math program at Beaconsfield High School emphasizes the development of the 2 competencies set forth by the Ministère de l'Éducation, du Loisir et du Sport.

1. Solves a situational problem.
2. Uses mathematical reasoning.

Working collaboratively, using hands-on manipulatives and technology based apps Secondary 2 math students at BHS will follow a program of study that can be broken down into the following topics:

- **Algebra:** Representing situations using simplified algebraic expressions and constructing, evaluating and solving algebraic equations
- **Geometry:** Working with 2D & 3D shapes, circles, units of area and constructing dilations. Investigating and working with the area of various polygons and polyhedrons.
- **Proportions:** Working with ratios, rates and proportions to find an unknown value.
- **Probability:** Studying random experiments and calculating the theoretical and experimental probability of events.

## **SCIENCE & TECHNOLOGY- SECONDARY 2**

The curriculum is designed to be a student-based hands-on program. Students will find solutions to scientific or technological problems, make use of knowledge about science and technology, and communicate using scientific and technological language and symbols. The curriculum is theme-based and continues to integrate concepts from the four worlds: living, material, earth and space and technological. There will be projects and experiments based on learning through the use of technology and students will develop various methods for analyzing problems. When possible the program will be enriched with workshops, field trips and guest speakers.

For students in the Défi Français Program Science and Technology is taught in French.

## **GEOGRAPHY/HISTORY or GÉOGRAPHIE/ HISTOIRE - SECONDARY 2**

The geography component of this course introduces basic concepts and skills in geography. Various territories will be studied including: cities, industrial territories, and Native Canadian territories. Students will work towards developing the following three competencies:

1. Understanding the organization of a territory.
2. Interpreting territorial issues.
3. Constructing his/her consciousness of global citizenship

The history component of this course traces the evolution of western society, from the Renaissance to the present day. Study focuses on daily life as well as major

## **GEOGRAPHY/HISTORY or GÉOGRAPHIE/ HISTOIRE - SECONDARY 2 (CONT`D)**

achievements of various civilizations. In this course students will work towards developing the following three competencies:

4. Examining social phenomena from a historical perspective.
5. Interpreting social phenomena using the historical method.
6. Constructing his/her consciousness of citizenship through the study of history.

## **ETHICS AND RELIGIOUS CULTURE - SECONDARY 2**

The recognition of others and the pursuit of the common good are the two main objectives of the program. They are interdependent and common to both ethics and religious culture. By bringing together ethics and religious culture into a single program, students will be encouraged to engage in critical reflection on ethical questions and to understand the phenomenon of religion by practicing dialogue, in a spirit of openness.

Through dialogue, students are invited to engage in reflection, interact with others and develop a point of view.

The ERC program focuses on the development of two competencies which must be developed in an integrated manner, one with the other, as opposed to in a linear manner:

- Reflects on ethical questions and practices dialogue
- Demonstrates an understanding of the phenomenon of religion and practices dialogue
- The ERC program also takes into account secular expressions and representations of the world and of human beings, which seek to define the meaning and value of human experience outside the realm of religious beliefs and affiliation.

Students will have the opportunity to analyze forms of religious expressions, make connections between these expressions and the social and cultural environment, and examine various ways of thinking, being and acting.

## **PHYSICAL EDUCATION - SECONDARY 2**

Physical Education is designed to teach skills, knowledge, sportsmanship and safety through an exposure to a wide variety of sports and recreational activities. The students will establish a degree of physical fitness, a respect for a healthy body and mind, and an appreciation for lifetime sports.

Physical education at the Secondary 2 level focuses on the development of skills and on an understanding of team and individual sports with special emphasis placed on participation, sportsmanship, cooperation, and personal fitness. A Beaconsfield High School physical education uniform is compulsory.

## **PHYSICAL EDUCATION - SECONDARY 2 (CONT'D)**

Following the MELS guidelines, by the end of Secondary school, students will have fulfilled the three competencies designed specifically for the physical education program.

### **Competency 1: *To perform movement skills in different physical activity settings.***

- a) Analyzes the situation according to the requirements of the setting.
- b) Performs movement skills in different constraints.
- c) Evaluates own motor efficiency and process in the light of the goal pursued.

### **Competency 2: *To interact with others in different physical activity settings.***

- a) Cooperates in developing a plan of action.
- b) Participates in carrying out the plan of action.
- c) Cooperates in evaluating the plan of action.

### **Competency 3: *To adopt a healthy, active lifestyle.***

- a) Analyzes the impact of the certain personal lifestyle habits on his/her own health and well-being.
- b) Develops a plan designed to change some personal lifestyle habits.
- c) Carries out the plan.
- d) Evaluates own process and lifestyle habits.

## **SECONDARY 2 OPTIONS**

### **ARTS OPTIONS – SECONDARY 2**

(Please note that the Arts option chosen in Secondary 1 continues at the Secondary 2 level, as required by the Ministry of Education.)

### **VISUAL ARTS – SECONDARY 2**

**Aims of the course:** The course teaches the student the language of visual art, the use of specific artistic techniques, how to use his/her abilities, how to use imagination and creativity and understand the nature of aesthetic experience.

**Course Content:** The course is divided into the following subject-specific competencies that can be interrelated or touched upon independently.

**Creates Personal/Media Images:** Students will explore ideas, which are called Themes, and experiment with materials, (Gestures and Techniques), to create a visual arts work or a media production. Through this process he/she will learn the elements of visual art language and share his/her experience of visual creation.

**Appreciates Works of Art** and cultural objects from the world's artistic heritage: The student will examine images of art to identify the components of an artistic production as well as the symbolic and expressive elements that move them.

### **DANCE – SECONDARY 2**

The course builds on the foundation presented in Dance in Secondary 1 with an emphasis on creativity and the learning process in which students are involved. Students will also demonstrate knowledge of the body and movement skills in performance dance. Students will continue to experience a variety of dance as well as develop an appreciation of dance as an art form and an industry. Students will be required to participate in a final dance show at the end of the year.

### **DRAMA – SECONDARY 2**

Our drama program at BHS allows for the development of acting abilities through voice-training, body movements and creative expression. In this continuation of Secondary 1 drama, students will learn about pantomime, improvisation, monologues, script study, short plays and much more. They will have the chance to create, perform and appreciate dramatic works.

### **MUSIC – SECONDARY 2**

At this level, the student broadens his/her basic musical concepts to a wider knowledge of scales, keys, rhythm patterns and instrumental techniques. The student gains a greater appreciation of various musical styles through listening and performing. The emphasis is on developing a proper ensemble balance, more acute listening skills and a preparation towards the more demanding Secondary 3 musical skills. The student is presented with the opportunity to perform in the Junior Jazz Band and in the Junior Concert Band.

## **SECONDARY 3**

### **COMPULSORY COURSE DESCRIPTIONS**

#### **ENGLISH - SECONDARY 3**

The English Cycle 2 Language Arts program is implemented over three years. The goals are to further develop student reading, writing, and oral communication through a variety of activities including: independent reading, class reading, group discussion, research, essay writing, creative writing, peer editing, media exploration and media production. We will create an environment that encourages effective expression of every individual's ideas.

Student assessment incorporates Learning and Evaluation Situations (LES) and Evaluation Situations (ES). The evaluation process may be subject to changes based on progress through each term. Formal reports will be issued three times per year and an early Interim report will be issued once a year.

**Term reports** may include all three of the following competencies:

**Competency 1:** Uses language to communicate and to learn.

Evaluation: Group seminars and presentations, speaking and listening skills, in-class discussions, debates.

**Competency 2:** Reads and listens to written, spoken and media texts.

Evaluation: Journals, responding to fiction and non-fiction texts for purpose writing, and editing.

**Competency 3:** Produces written and media texts for personal and social purposes.

Evaluation: Writing process, editing, various writing forms and media production.

#### **BILINGUAL FRENCH - SECONDARY 3**

This course stimulates the study of the spoken and written French language arts. Both documentary and linguistic texts are used. Students are expected to express themselves on subjects within their daily experience as well as on the contents of assigned texts. They are also expected to write descriptive paragraphs, letters and short compositions.

#### **IMMERSION FRENCH – SECONDARY 3**

This course is designed for students who have had immersion education or who have acquired a basic mastery of the language. It provides a deeper understanding of the finer points of the language (grammar). Reading selections are mainly literary and informative and are chosen to familiarize the student with the various aspects of the French culture. Written expression consists of compositions, short essays, and literary analysis.

## **ENRICHED FRENCH – DÉFI FRANÇAIS - SECONDARY 3**

This is an enriched French course designed to challenge students who demonstrate a high level of competence in written and oral French. The three competencies (speaking, reading and writing) are developed to the fullest.

## **MATHEMATICS – SECONDARY 3**

Math is a science with a universal language that plays an important role in a person's intellectual, social and cultural development. It gives students the tools they need to adjust to a changing world, to ***make the most of their intuition, creativity and critical judgment***, and to make decisions. In so doing, mathematics helps them to construct their identity and world-view and to become empowered. It prepares them to act as thoughtful and responsible citizens in society. In the first year of Cycle 2, students complete their basic education in mathematics.

### **Arithmetic and Algebra**

- Real numbers: rational and irrational
- Inequality relation
- Relations, functions and inverse
- System of two first-degree equations in two variables (of the form  $y = ax + b$ )
- Exponents
- Polynomials
- Algebraic Expressions
- Polynomial Operations
- Exponential Notation

### **Statistics and Probability**

- Discrete random variable and continuous random variable
- One-variable distribution (Sampling methods, Graphs: histogram and box-and-whisker plots, mean, mode, median, range (including interquartile range).

### **Geometry**

- Solids (Net, projection and perspective)
- Volume (Units)
- Relationships between SI units of volume, including measures of capacity
- Pythagorean Theorem
- Surface Area and Volume of Solids

## **MATHEMATICS ENRICHED – SECONDARY 3**

The course content for the enriched program is essentially the same as the regular program. The difference lies in the speed at which the material is covered and the depth to which these concepts are seen. Also, enrichment exercises are provided.

### **SCIENCE AND TECHNOLOGY – SECONDARY 3**

In year I of Cycle 2 (Sec. 3), students take **General Science and Technology** as part of the general education pathway. In general science students will find solutions to scientific or technological problems, make use of knowledge about science and technology, and communicate using scientific and technological language and symbols. Both courses build on concepts from the living, material and technological worlds. In the General Science Program, an earth and space unit is also taught.

### **HISTORY OF QUEBEC AND CANADA OR HISTOIRE DU QUEBEC ET DU CANADA – SECONDARY 3**

This course may be taken in English or in French. This course traces our national history in chronological order starting with indigenous peoples to its French beginnings, through the British Colonial period until the year 1840. It affords an understanding of present-day Quebec and Canada through study of past successes and failures. The course focuses on these common concepts: social, economic, cultural and political. This course is a precursor for the secondary 4 History of Quebec and Canada course. Students will begin to build the skills needed to succeed in the secondary 4 History of Quebec and Canada course.

### **PHYSICAL EDUCATION - SECONDARY 3**

Secondary 3 Physical Education is an extension of the program previously established with increased emphasis on advanced skill development, rules, team strategy and game situations. In addition, some leisure time activities will be introduced. A Beaconsfield High School physical education uniform is compulsory.

Following the MELS guidelines, by the end of Secondary school, students will have fulfilled the three competencies designed specifically for the physical education program.

#### **Competency 1: *To perform movement skills in different physical activity settings.***

- a) Analyzes the situation according to the requirements of the setting.
- b) Performs movement skills in different constraints.
- c) Evaluates own motor efficiency and process in the light of the goal pursued.

#### **Competency 2: *To interact with others in different physical activity settings.***

- a) Cooperates in developing a plan of action.
- b) Participates in carrying out the plan of action.
- c) Cooperates in evaluating the plan of action.

#### **Competency 3: *To adopt a healthy, active lifestyle.***

- a) Analyzes the impact of the certain personal lifestyle habits on his/her own health and well-being.
- b) Develops a plan designed to change some personal lifestyle habits.
- c) Carries out the plan.
- d) Evaluates own process and lifestyle habits.

## **SECONDARY 3 OPTIONS**

### **ARTS OPTIONS – SECONDARY 3 (COMPULSORY)**

#### **VISUAL ART – SECONDARY 3**

The Secondary 3 program is a continuation of the Cycle I program. The program is based on two complementary competencies (see below) which are developed in an interactive manner and which are mutually enriching.

***Creates personal and media images:*** Students explore ideas (themes), learn to transform gestures (use different techniques such as drawing, painting, printmaking, carving, assembling, etc.), make use of the properties of materials (pencil, graphite, charcoal, oil pastels, acrylic paint, linoleum, plaster, etc.) to create personal images. Through this process they will learn the elements of visual arts language (color, values, hues, line, form, negative space etc.).

When creating media images students will gain a better understanding of the creative process behind visual communication. They will learn to consciously use visual codes to better reach the target audience and to transmit a precise message.

***Appreciates images:***

Students will develop their critical visual acuity and perception skills. They will also develop their critical judgment and their aesthetic awareness. This can lead them to discover new sources of inspiration and creation. It may also help them find ways of enriching a production they are working on. Through the discovery of artists and artistic movements in history, students will create their own personal work using similar techniques and themes.

#### **DANCE – SECONDARY 3**

The course builds on the foundation presented in Dance in Secondary 2 with an emphasis on creativity and the learning process in which students are involved. Students will also demonstrate knowledge of the body and movement skills in performance dance. Students will continue to experience a variety of dance as well as develop an appreciation of dance as an art form and an industry. Students will be required to participate in a final dance show at the end of the year.

#### **DRAMA – SECONDARY 3**

This a “bridge” course in the sense that it builds on the skills learned in Secondary 1 and 2, yet prepares students for the Drama Studio programs in Secondary 4 and 5. To this end, the Secondary 3 year is a mix of exploring original and published scripts in order to get used to producing plays on a larger scale. The main focus of the year is on character design and performance through solo, paired and group plays. The year culminates with performances by the actors’ in short drama productions.

### **MUSIC - SECONDARY 3**

At this level, continued emphasis on developing musicianship is given through progressive technical studies, theory and more difficult repertoire. A large repertoire of fine band and ensemble music is performed and analyzed. Instrumental techniques are expanded to include alternate fingerings and the chromatic scale. It is at this level that the music student begins to develop physically in his/her playing, bringing along a more versatile quality to his/her performance. Students are presented with many other opportunities to perform such as jazz band, concert band, music festivals and numerous community events.

## **OPTION B – SECONDARY 3**

### **ART STUDIO - SECONDARY 3**

This course is a more advanced visual arts class, which allows you more freedom to discover your inner artist. Art journaling will be introduced. A great option for artistic students who have not had the opportunity to take visual arts.

### **COMPUTERS: PROGRAMMING – SECONDARY 3**

Students will learn the basics of game programming on the computer and will be able to create their own video games after one term of tutorials. Group collaboration will simulate a real work environment similar to gaming companies, providing a realistic work experience.

### **INTRO TO DRUMLINE - SECONDARY 3**

This class is open to all grade 9 students. Students will learn how to read drum music while learning how to play the various percussion instruments such as snare drum, bass drum, toms and cymbals. No previous music experience required!

### **GADGETS – SECONDARY 3**

Do you see yourself as creative? Do you want an outlet for your imagination? Here is your opportunity to take an idea and make it a reality! Learn about designing blueprints, creating 3D models, prototyping and fabricating your dream invention. Market the product and you might be the next billionaire inventor!!

### **MUSIC STUDIO – SECONDARY 3**

This class is open to students who are also registering for the grade 9 music class. Students will continue to develop their musicianship skills through more advanced band repertoire chosen specifically for this class. The entire focus of this class is performance based.

### **SPORT FITNESS – SECONDARY 3**

Introduces grade 9 students to nutrition, fitness and health related curriculum with an emphasis on sport activity. They will study the relationship between sport and fitness and the impact of exercise on their daily lives. Concepts combining exercise and fun will hold importance.

### **SPEAK UP – SECONDARY 3**

Develop your confidence in this dynamic public speaking and debating course. Students will learn how to give speeches and turn arguments into victories. If you enjoy class discussion, voicing your opinions and defending a point of view, this class is for you. Students will learn how to prepare and deliver speeches as well as different styles of debate. Students will have the opportunity to represent BHS at competitions and tournaments in the Montreal region.

## **SECONDARY 4**

### **COMPULSORY COURSE DESCRIPTIONS**

#### **ENGLISH - SECONDARY 4**

The English Language Arts program is a three year process. The goals are to further develop student reading, writing, and oral communication through a variety of activities including: independent reading, class reading, group discussion, research, essay writing, creative writing, peer editing, media exploration and media production. We will create an environment that encourages effective expression of every individual's ideas.

Student assessment incorporates Learning and Evaluation Situations (LES) and Evaluation Situations (ES). The evaluation process may be subject to changes based on progress through each term. Formal reports will be issued three times per year and an early Interim report will be issued once a year,

Term reports may include all three of the following competencies:

**Competency 1:** Uses language to communicate and to learn.

Evaluation: Group seminars and presentations, speaking and listening skills, in-class discussions, debates.

**Competency 2:** Reads and listens to written, spoken and media texts.

Evaluation: Journals, responding to fiction and non-fiction texts for purpose writing, and editing.

**Competency 3:** Produces written and media texts for personal and social purposes.

Evaluation: Writing Process, editing, various writing forms and media production.

#### **BILINGUAL FRENCH - SECONDARY 4**

This course stimulates a study of the spoken and written French language arts. Both documentary and linguistic texts are used. Students are expected to express themselves on subjects within their daily experience as well as on the contents of assigned texts and to write with reasonable accuracy descriptive paragraphs, letters and short compositions.

#### **IMMERSION FRENCH – SECONDARY 4**

This course is designed for students who have had immersion education or who have acquired a basic mastery of the language. They provide a deeper understanding of the finer points of the language (grammar). Reading selections are mainly literary and informative and are chosen to familiarize the student with the various aspects of the French culture. Written expression consists of compositions, short essays, and literary analysis.

## **ENRICHED FRENCH – DÉFI FRANÇAIS - SECONDARY 4**

This is an enriched French course designed to challenge students who demonstrate a high level of competence in written and oral French. The three competencies (speaking, reading and writing) are developed to the fullest.

## **MATHEMATICS – SECONDARY 4**

**Please Note:** successful completion of all three math options will lead to acceptance into pre-university programs at CEGEP. Both the T&S Math and Science Math options will allow for entrance into CEGEP Science Programs and Commerce/Business Related Programs.

### **Selecting the Right Path: An Informed Choice**

During the first year of Cycle 2, students complete the mathematics option survey to help them determine the math pathway that best suits them. To help students make this choice, the teacher gets them to identify their interests and aspirations and become aware of their reactions, attitudes and preferences in situations related to the different branches of mathematics and the focus of each path. The teacher considers the extent to which students have developed the competencies – both mathematical as well as the cross-curricular – before recommending a math option to the student.

Students in Cycle 2, Year 2 may continue on the same path, or consider a different math option with their teacher's recommendation and input.

## **CULTURAL, SOCIAL & TECHNICAL MATH – SECONDARY 4**

### **Arithmetic and Algebra**

- Algebraic expression (First-degree inequality in two variables)
- Relation, function and inverse (Real functions)
- System (First-degree equations in two variables)

### **Probability**

- Subjective probability
- Fairness

### **Statistics**

- One-variable distribution: percentile, mean deviation
- Two-variable distribution: Linear correlation
- Correlation coefficient
- Regression line

### **Geometry and Graph**

- Analytic geometry: distance, slope, point of division, straight line and half-plane
- Parallel and perpendicular lines
- Measurement: relations in triangles: sine, cosine, tangent, sine law, Hero's Formula

## TECHNICAL & SCIENTIFIC MATH – SECONDARY 4

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.

- **compare** solutions with peers, considering various points of view
- **exercise critical judgment** when validating conjectures
- **look for** causes of problems, mistakes, anomalies in solutions
- **make recommendations** with the view to taking corrective measures or making actions more efficient.

### **Arithmetic and Algebra**

- Arithmetic and algebraic expressions: real numbers, radicals ( $n$ th root)
- Powers of base 2 and 10 (changing bases), first-degree inequality in two variables
- Relation, function and inverse: second-degree polynomial, exponential, greatest integer (i.e. greatest integer not greater than  $x$ )
- Periodic, piecewise or step function: multiplicative parameter
- System of first-degree equations in two variables

### **Statistics and Probability**

- Conditional probability
- Fairness: Odds, Mathematical expectation
- One-variable distribution: mean deviation, standard deviation
- Two-variable distribution: linear and other types of correlation
- Correlation coefficient
- Regression line and curves related to the functional models under study

### **Geometry**

- Analytic geometry: distance between two points, coordinates of a point of division, straight line
- Equation of a straight line, slope, perpendicular and parallel lines, perpendicular, bisectors
- Measurement: Metric relations and trigonometric ratios (sine, cosine, tangent) in right triangles

## SCIENCE MATH – SECONDARY 4

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 behaviour 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.

## **SCIENCE MATH – SECONDARY 4 (CONT`D)**

### **Arithmetic and Algebra**

- Algebraic expression: algebraic identity (of the second degree), second-degree equation and inequality in one variable
- Real function: Step function, greatest-integer function (greatest integer not greater than  $x$ ), second-degree polynomial function, parameter
- Systems: first-degree equations in two variables, first-degree and second-degree equations in two variables.

### **Statistics**

- Two-variable distribution: linear correlation
- Correlation coefficient
- Regression line

### **Geometry**

- Equivalent figures
- Analytic geometry: line and distance between two points
- Measurement: metric and trigonometric relations in triangles: sine, cosine, tangent; sine and cosine laws

## **SCIENCE AND TECHNOLOGY – SECONDARY 4**

In year 2 of Cycle 2 (Sec. 4), students **must** choose one of two science and technology pathways:

- 1) The **Non Chemistry/Physics Pathway**; or
- 2) The **Chemistry/Physics Pathway**, if a student is considering enrolling in chemistry and/or physics in year 3 of cycle 2 (Sec. 5).

### **NON-CHEMISTRY/PHYSICS PATHWAY**

Students selecting the **non-chemistry/physics pathway** will enroll in the **General Science and Technology Course**. The course is taught six times in a six day cycle and builds on concepts learned in Secondary 1, 2 and 3. Consequently, students will continue to investigate concepts from the living, material and technological worlds as well as, earth and space.

In the **General Science and Technology Course**, students are afforded the opportunity to gain a better understanding of scientific phenomena, technological achievements and issues related to climate change, the energy challenge of human kind, and deforestation.

## **CHEMISTRY/PHYSICS PATHWAY**

Students selecting the **chemistry/physics pathway** **must** enroll in the **Advanced General Course** (the **General Science and Technology Course** combined with an **Environmental Science and Technology Course**). The **Advanced General Science and Technology Course** is taught eight times in a six day cycle. In addition to the issues addressed in the General Science and Technology course, students will examine issues related to dextotoxicology, biotechnology and genetics.

### **NOTE:**

1. Successful completion of the General Science and Technology Course (embedded into the Advanced General Course) is required for high school graduation.
2. Students **must** enroll in either the Science option math course or the Technical & Scientific option math course when enrolled in the Chemistry/Physics Pathway.
3. Students **must** achieve 75% or more in the Advanced General Science and Technology course **and** 75% or more in either the Science option math course or the Technical and Scientific option math course in Secondary 4 to enroll in chemistry and/or physics in secondary 5.

## **HISTORY OF QUEBEC AND CANADA OR HISTOIRE DU QUEBEC ET DU CANADA – SECONDARY 4**

***This course must be passed to achieve the MEES High School Leaving Certificate.***

The secondary 4 History of Quebec and Canada course continues where the secondary 3 course finishes. The time period covered in secondary 4 starts in 1840 and finishes in modern day Quebec and Canada. Like the secondary 3 course, the secondary 4 History of Quebec and Canada course focuses on the social, economic, cultural and political common concepts.

## **ETHICS AND RELIGIOUS CULTURE– SECONDARY 4**

The recognition of others and the pursuit of the common good are the two main objectives of the program. They are interdependent and common to both ethics and religious culture. By bringing together ethics and religious culture into a single program, students will be encouraged to engage in critical reflection on ethical questions and to understand the phenomenon of religion by practicing dialogue, in a spirit of openness.

Through dialogue, students are invited to engage in reflection, interact with others and develop a point of view.

The ERC program focuses on the development of three competencies which must be developed in an integrated manner, one with the other, as opposed to in a linear manner:

- Reflects on ethical questions

## **ETHICS AND RELIGIOUS CULTURE– SECONDARY 4 (CONT`D)**

- Demonstrates an understanding of the phenomenon of religion
- Engages in Dialogue

The ERC program also takes into account secular expressions and representations of the world and of human beings, which seek to define the meaning and value of human experience outside the realm of religious beliefs and affiliation.

Students will have the opportunity to analyze forms of religious expressions, make connections between these expressions and the social and cultural environment, and examine various ways of thinking, being and acting.

## **PHYSICAL EDUCATION – SECONDARY 4**

Secondary 4 physical education offers the students an exposure to various leisure time sport pursuits. Choices include tennis, soccer, touch football, social dance, softball, aerobics, team handball, badminton, basketball, volleyball, and weight training. All classes at this level are co-educational. Appropriate physical education attire is compulsory.

Following the MELS guidelines, by the end of secondary school, students will have fulfilled the following three competencies designed specifically for the physical education program:

### **Competency 1: *To perform movement skills in different physical activity settings.***

- a) Analyzes the situation according to the requirements of the setting.
- b) Performs movement skills in different constraints.
- c) Evaluates own motor efficiency and process in the light of the goal pursued.

### **Competency 2: *To interact with others in different physical activity settings.***

- a) Cooperates in developing a plan of action.
- b) Participates in carrying out the plan of action.
- c) Cooperates in evaluating the plan of action.

### **Competency 3: *To adopt a healthy, active lifestyle.***

- a) Analyzes the impact of the certain personal lifestyle habits on his/her own health and well being.
- b) Develops a plan designed to change some personal lifestyle habits.
- c) Carries out the plan.
- d) Evaluates own process and lifestyle habits.

## **ARTS OPTIONS – SECONDARY 4 (COMPULSORY)**

### **VISUAL ART CYCLE 2**

The Secondary Cycle 2 program is a continuation of the Secondary Cycle I program. The program is based on two complementary competencies which are developed in an interactive manner and which are mutually enriching.

***Creates personal and media images:*** Students explore ideas (themes), learn to transform gestures (use different techniques such as drawing, painting, printmaking, carving, assembling, etc.), make use of the properties of materials (pencil, graphite, charcoal, oil pastels, acrylic paint, linoleum, plaster, etc.) to create personal images. Through this process they will learn the elements of visual arts language (color, values, hues, line, form, negative space etc...). When creating media images students will gain a better understanding of the creative process behind visual communication. They will learn to consciously use visual codes to better reach the target audience and to transmit a precise message.

***Appreciates images:*** Students will develop their critical visual acuity and perception skills. They will also develop their critical judgment and their aesthetic awareness. This can lead them to discover new sources of inspiration and creation. It may also help them find ways of enriching a production they are working on. Through the discovery of artists and artistic movements in history, students will create their own personal work using similar techniques and themes.

### **VISUAL ART - SECONDARY 4**

Attached to the compulsory program is an additional 2 credits which provides more in depth learning and a more comprehensive program.

The art history component in Secondary 4 is Modern Art (Impressionism, cubism, pop art, etc...).

The students in Secondary 4 have the opportunity to create murals which will be displayed in the hall in their final year of high school. The students really enjoy this project and, if you take a walk through Beaconsfield High School, you will certainly understand why.

### **COMPUTERS: DIGITAL MEDIA – SECONDARY 4**

Students will explore the computer arts and media world, including advertising, graphic design, public service announcements, short movies, stop animation, digital photography, etc. Students will also collaborate in making a short film from pre-production to post-production and will use computer applications to create media based projects.

## **CREATIVE MOVEMENT – SECONDARY 4**

Creative Movement is the next step in Sport Fitness from the grade 9 program. Throughout their studies, students will engage in creative movement to study the relationship between sport fitness and the impact of exercise on their daily lives. This class will present students with a variety of learning and evaluation situations that enable them to demonstrate their competency in creative movement. Students will make use of various stimuli for creation of their movement sequence. Students will also mobilize strategies associated with creative and dynamic movements and make use of these elements in accordance with their creative intention. Students will work individually or in groups to adapt and present movement sequences. Projects using visual communication will also be used in order to demonstrate their acquired knowledge.

## **DANCE – SECONDARY 4**

Teaches students a global perspective on dance with an emphasis on creative exploration and development. Through this creative process the students will also develop an appreciation and better knowledge of the body and how it moves through the art of dance.

## **DRAMA – SECONDARY 4 (Drama Studio)**

This course will consolidate and enrich the knowledge and skills inherent in a drama program, with a focus on developing performance techniques. Emphasis will be placed on composing, staging, adapting and producing dramatic works in a variety of theatre styles. Drama Studio offers the opportunity for students to explore what they love most about theatre, as the year revolves around a large-scale production for school and public audiences, in which all students have a role – either on or off stage.

*\*Strongly recommended for students who have taken drama before. This course is for serious drama students, as there are extra-curricular time commitments.\**

## **MUSIC - SECONDARY 4**

At this level, continued emphasis on developing musicianship is given through progressive technical studies, theory and more difficult repertoire. A large repertoire of fine band and ensemble music is performed and analyzed. It is at this level that the music student begins to develop physically in his/her playing, bringing along a more versatile quality to his/her performance. Students are presented with many other opportunities to perform such as jazz band, concert band, music festivals and numerous community events. Students with no previous experience may choose this option with prior approval from the music teachers.

## **SECONDARY 5 COMPULSORY COURSE DESCRIPTIONS**

### **ENGLISH - SECONDARY 5**

The English Language Arts program is a three year process. The goals are to further develop student reading, writing, and oral communication through a variety of activities including: independent reading, class reading, group discussion, research, essay writing, creative writing, peer editing, media exploration and media production. We will create an environment that encourages effective expression of every individual's ideas.

Student assessment incorporates Learning and Evaluation Situations (LES) and Evaluation Situations (ES). The evaluation process may be subject to changes based on progress through each term. Formal reports will be issued three times per year and an early Interim report will be issued once a year.

Term reports may include all three of the following competencies:

**Competency 1:** Uses language to communicate and to learn.

Evaluation: Group seminars and presentations, speaking and listening skills, in-class discussions, debates.

**Competency 2:** Reads and listens to written, spoken and media texts.

Evaluation: Journals, responding to fiction and non-fiction texts for purpose writing, and editing.

**Competency 3:** Produces written and media texts for personal and social purposes.

Evaluation: Writing Process, editing, various writing forms and media production.

### **BILINGUAL FRENCH - SECONDARY 5**

This course stimulates a study of the spoken and written French language arts. Both documentary and linguistic texts are used. Students are expected to express themselves on subjects within their daily experience as well as on the contents of assigned texts. They are also expected to write descriptive paragraphs, letters and short compositions.

### **IMMERSION FRENCH – SECONDARY 5**

This course is designed for students who have had immersion education or who have acquired a basic mastery of the language. Students are provided with a deeper understanding of the finer points of the language (grammar). Reading selections will include narrative, informative and expressive texts. These are chosen to familiarize the student with the various aspects of the French culture. Written expression consists of compositions, short essays, and literary analysis.

## **ENRICHED FRENCH - DÉFI FRANÇAIS- SECONDARY 5**

This enriched French course is designed to challenge students who demonstrate a high level of competence in written and oral French. The three competencies (speaking, reading and writing) are developed to the fullest.

Classic French literature is also a large portion of this program.

## **MATHEMATICS – SECONDARY 5**

**Please Note:** successful completion of all three options will lead to acceptance into pre-university programs at CEGEP and that both the T&S Math and Science Math options will allow for entrance into CEGEP science programs.

### **Selecting the Right Path: An Informed Choice**

During the first year of Cycle 2, students complete the mathematics option survey to help them determine the math pathway that best suits them. To help students make this choice, the teacher gets them to identify their interests and aspirations and become aware of their reactions, attitudes and preferences in situations related to the different branches of mathematics and the focus of each path. The teacher considers the extent to which students have developed the competencies – both mathematical as well as the cross-curricular – before recommending a math option to the student.

Students in Cycle 2, Year 2 may continue on the same path, or consider a different math option with their teacher's recommendation and input.

## **CULTURAL, SOCIAL & TECHNICAL MATH – SECONDARY 5**

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**
- **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 (First-degree inequalities in two variables)
- Polygon of constraints
- Function to be optimized (objective function)

### **Probability**

- Voting Procedures
- Conditional probability

### **Geometry**

- Equivalent figures
- Graph Theory: path and circuit; directed, weighted, critical path, tree graph

## TECHNICAL & SCIENTIFIC MATH – SECONDARY 5

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.

- **compare** solutions with peers, considering various points of view
- **exercise critical judgment** when validating conjectures
- **look for** causes of problems, mistakes, anomalies in solutions
- **make recommendations** with the view to taking corrective measures or making actions more efficient.

**Arithmetic and Algebra**– Relation, function and inverse: exponential and logarithmic, second-degree polynomial (general, standard and factored forms) and square root, sinusoidal, tangent, greatest integer, rational

- Additive parameter, operation on functions, system of first-degree inequalities in two variables, system of equations and inequalities involving various functional model
- **Geometry**– Equivalent figures (area, volume, capacity)
- Analytic geometry: geometric locus and relative position, plane loci involving lines or circles only, and conics Standard unit circle
- Radian, arc length
- Trigonometric identity: Vector
- Resultant, projection, operation
- Measurement: trigonometric relations in triangles (sine and cosine laws), metric relations in circles

## SCIENCE MATH – SECONDARY 5

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 behaviour 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**

- Arithmetic and algebraic expressions: absolute value, radicals, exponents and logarithms
- Relation, function and inverse: absolute value, square root, rational, exponential, logarithmic, sinusoidal, tangent
- Piecewise function: operations on functions
- Systems: first-degree inequalities in two variables, second-degree equations (with respect to conics)

## **SCIENCE MATH – SEC. 5 (CONT'D)**

### **Geometry**

- Analytic geometry: standard unit circle
- Trigonometric identity: vector, conic
- Parabola
- Circle, ellipse and hyperbola centered at the origin

## **CONTEMPORARY WORLD or MONDE CONTEMPORAIN (IMMERSION) - SECONDARY 5**

The Contemporary World program aims to:

- Help students grasp the complexity of the world today and understand the diversity within society
- Help students develop a critical awareness by studying problems and issues of the contemporary world
- Prepare students to participate as responsible citizens in social debate

In this program, students consolidate their previous learning in the field of social sciences and continue to develop concepts that foster critical judgment. The students will study various fields in the Social Sciences, e.g. History, Geography, Economics and Political Science.

## **ETHICS AND RELIGIOUS CULTURE – SECONDARY 5**

The recognition of others and the pursuit of the common good are the two main objectives of the program. They are interdependent and common to both ethics and religious culture. By bringing together ethics and religious culture into a single program, students will be encouraged to engage in critical reflection on ethical questions and to understand the phenomenon of religion by practicing dialogue, in a spirit of openness.

Through dialogue, students are invited to engage in reflection, interact with others and develop a point of view.

The ERC program focuses on the development of three competencies which must be developed in an integrated manner, one with the other, as opposed to in a linear manner:

- Reflects on ethical questions
- Demonstrates an understanding of the phenomenon of religion
- Engages in dialogue

The ERC program also takes into account secular expressions and representations of the world and of human beings, which seek to define the meaning and value of human experience outside the realm of religious beliefs and affiliation.

Students will have the opportunity to analyze forms of religious expressions, make connections between these expressions and the social and cultural environment, and examine various ways of thinking, being and acting.

## **PHYSICAL EDUCATION – SECONDARY 5**

Secondary 5 physical education offers the students an exposure to various leisure time sport pursuits. Choices include tennis, soccer, touch football, social dance, softball, aerobics, team handball, badminton, basketball, volleyball, and weight training. All classes at this level are co-educational. Appropriate physical education attire is compulsory.

Following the MELS guidelines, by the end of Secondary school, students will have fulfilled the following three competencies designed specifically for the physical education program:

### **Competency 1: *To perform movement skills in different physical activity settings.***

- a) Analyzes the situation according to the requirements of the setting.
- b) Performs movement skills in different constraints.
- c) Evaluates own motor efficiency and process in the light of the goal pursued.

### **Competency 2: *To interact with others in different physical activity settings.***

- a) Cooperates in developing a plan of action.
- b) Participates in carrying out the plan of action.
- c) Cooperates in evaluating the plan of action.

### **Competency 3: *To adopt a healthy, active lifestyle.***

- a) Analyzes the impact of the certain personal lifestyle habits on his/her own health and well-being.
- b) Develops a plan designed to change some personal lifestyle habits.
- b) Carries out the plan.
- c) Evaluates own process and lifestyle habits.

## **ARTS OPTIONS – OPTION A - SECONDARY 5 (COMPULSORY)**

### **VISUAL ART - CYCLE 2**

The Secondary Cycle 2 program is a continuation of the Secondary Cycle I program. The program is based on two complementary competencies which are developed in an interactive manner and which are mutually enriching.

***Creates personal and media images:*** Students explore ideas (themes), learn to transform gestures (use different techniques such as drawing, painting, printmaking, carving, assembling, etc.), make use of the properties of materials (pencil, graphite, charcoal, oil pastels, acrylic paint, linoleum, plaster, etc.) to create personal images. Through this process they will learn the elements of visual arts language (color, values, hues, line, form, negative space etc.).

When creating media images students will gain a better understanding of the creative process behind visual communication. They will learn to consciously use visual codes to better reach the target audience and to transmit a precise message.

#### ***Appreciates images:***

Students will develop their critical visual acuity and perception skills. They will also develop their critical judgment and their aesthetic awareness. This can lead them to discover new sources of inspiration and creation. It may also help them find ways of enriching a production they are working on. Through the discovery of artists and artistic movements in history, students will create their own personal work using similar techniques and themes.

### **VISUAL ART – SECONDARY 5**

Attached to the compulsory program is an additional 2 credits which provides more in depth learning and a more comprehensive program. The art history component is Contemporary Art and Quebec Artists.

### **COMPUTER MEDIA & PROGRAMMING – SECONDARY 5**

This course allows students to choose between two paths: computer programming and/or digital media, depending on their preference. The course will offer the choice between basic programming skills or advanced programming design. The digital art section of the course allows students to work with Photoshop and Toon Boom to create digital animation and create uses for digital media.

Prerequisites: It is recommended that students have a working knowledge of computers.

## **CREATIVE MOVEMENT – SECONDARY 5**

This is the final year of Creative Movement which started in grade 9 as Sport Fitness. Throughout their studies, students will engage in creative movement to study the relationship between sport fitness and the impact of exercise on their daily lives. This class will present students with a variety of learning and evaluation situations that enable them to demonstrate their competency in creative movement. Students will make use of various stimuli for creation of their movement sequence. Students will also mobilize strategies associated with creative and dynamic movements and make use of these elements in accordance with their creative intention. Students will work individually or in groups to adapt and present movement sequences. Projects using visual communication will also be used in order to demonstrate their acquired knowledge. The final year of Creative Movement will re-emphasize the importance of being lifelong movers and embrace taking charge of the own physical fitness.

## **DANCE – SECONDARY 5**

Dance is a course that offers students the opportunity to perform, create and appreciate a variety of movement principles. Students will learn different choreographies and dance styles as well as create their own. Students will be required to participate in a final dance show performance at the end of the year which will be performed in front of the school and parents.

## **DRAMA – SECONDARY 5 (Drama Studio)**

Through their experiences in playmaking, performance and stage directing, students will further develop performance skills and techniques. Theatre styles from around the world are studied and presented as public performances. The main focus of the course revolves around a large-scale production for school and public audiences, in which all students have a role – either on or off stage. This is an excellent course for students considering the theatre arts in CEGEP.

*\*Strongly recommended for people who have taken drama before. This course is for serious drama students, as there are extra-curricular time commitments.\**

## **MUSIC – SECONDARY 5**

At this level, continued emphasis on developing musicianship is given through progressive technical studies, theory and more difficult compositions. A large repertoire of fine band and ensemble music is performed and analyzed. It is at this level that the music student begins to develop physically in his playing bringing along a more versatile quality to his performance. The student is presented with many other opportunities to perform such as concert band, stage band, music festivals, and numerous community events.

## **ADDITIONAL OPTIONS - SECONDARY 5**

### **CHEMISTRY/PHYSICS PATHWAY OPTIONS – SECONDARY 5**

Students who have achieved 75% or more in the Advanced General Science and Technology course and 75% or more in either the Science option math course or the Technical and Scientific option math course in Secondary 4 may enroll in chemistry and/or physics.

All Secondary 5 science and technology classes are taught four times in the six day cycle.

#### **CHEMISTRY – SECONDARY 5**

This course is an in-depth treatment of the ways in which matter changes and interacts. The course is rich in opportunities for learning and is best suited for highly motivated students. The topics covered include, but are not limited to: nomenclature; stoichiometry; chemical bonding; gases; thermochemistry; rates of reaction; chemical systems and equilibrium. Although much of the course material is theoretical in nature and there is a strong emphasis on mathematical problem-solving, the course does provide ample opportunity for investigative laboratory work. Emphasis during laboratory work is placed on using instruments correctly, hypothesizing, interpreting, problem-solving, decision-making and communicating.

Chemistry is required for students intending to pursue Health Sciences, Natural Science, Pure and Applied Science, or a science-related vocational program at CEGEP.

#### **PHYSICS – SECONDARY 5**

This course seeks to develop the student's ability to experiment and to derive the basic fundamental laws of nature. It is best suited for students who have the serious intention of pursuing one of the fields of science later in life.

The two areas investigated are optics and mechanics. The study of optics covers the behavior of light with respect to mirrors, lenses and other surfaces. The study of mechanics deals with motion, force, work and forms of energy.

Physics is required for students intending to pursue Health Sciences, Natural Science, Pure and Applied Science, or a science-related vocational program at CEGEP.

## **NON-CHEMISTRY/PHYSICS PATHWAY OPTIONS B&C – SECONDARY 5**

### **ART STUDIO – SECONDARY 5**

Students pursue the same learning as that of the compulsory program, but in greater depth. They foster greater autonomy in the management of the materials used and the time allotted to the work, as well as providing opportunities to work cooperatively by participating in group creations. Students record relevant information about their relative experiences and the meaning of their work in a journal or portfolio.

### **ART STUDIO – SECONDARY 5 (CONT'D)**

Students will complete an independent project. This is an ongoing project throughout the year. These projects will be placed in an exhibit organized by the students at the end of the year.

Students who wish to continue their studies in the Visual Arts will be guided in preparing their portfolio for CEGEP application.

Students should have some experience in Visual Arts to apply. A portfolio may be requested.

### **INTRODUCTION TO COMMERCE – SECONDARY 5**

This course will provide students with an overview of key concepts that are part of the foundation of a fast-paced business environment. Through a hands-on approach, students will be exposed to the basic principles of marketing, entrepreneurship and finance. The course will help students understand the forces that influence business decisions, as well as introduce them to the basics of business communication.

### **INDEPENDANT LIVING – SECONDARY 5**

Want to move out? Do you know how to find an apartment? Have you done the budget to see if it is doable? Debating on a new car or a second hand car purchase? How much would it actually cost to backpack through Europe? Interested in going on your “dream-job” for the day? Interested in organizing a charity event, exploring downtown and interviewing people in business and in our community? Independent Living offers: class discussions, projects, field trips, guest speakers and much more! Prepare yourself for the future!

### **LAW - SECONDARY 5**

We learn about how the law works, how the law applies to you and society in general. We look at criminal law, civil cases, crime scenes and end with a mock trial. This course includes topics like murder, assault, search and seizure, police and trial procedures, sentencing, contracts and case summaries.

## **LEADERSHIP – SECONDARY 5**

The Grade 11 Leadership Option will provide students with the opportunity to focus on the skills required to be a leader in today's society. Leadership styles, as well as communication skills, team work, self-actualization, public speaking, time-management and activity-based learning will be the some of the many topics explored in the course. Students in the course will also play an active role in the planning and implementing of school events therefore students will have numerous opportunities to get involved in the school &/or community. Students will also be creating and editing the school's yearbook.

## **MUSIC STUDIO – SECONDARY 5**

Students will study music theory and ear training, will get to practice their instrument as well as act as leaders with younger students. This course will prepare students for CEGEP music entrance exams and auditions but is open to any students with a desire to learn more about music.

## **PHYSICAL EDUCATION LEADERSHIP – SECONDARY 5**

This course is designed to help students keep themselves fit and to help others understand the importance of leadership. It is a very interactive course and the students practice how to work as a team. Students will acquire proper workout techniques, general knowledge relating to a variety of sports, and will develop self- confidence as an athlete and as a leader. Theoretical components include nutrition, anatomy, physiology, and sports psychology. Practical applications of the students' developing leadership skills see the class organizing intramurals for younger grades, as well as helping with the interscholastic sport team programs.

Acceptance into the course is subject to approval from the Physical Education Department.

## **PRE-CALCULUS – SECONDARY 5**

Engineers, doctors, physiotherapists, accountants, marketing specialists or any career in business or science has something in common; calculus. The Pre-calculus option is created to prepare students for the mathematics that await their lives outside of high school. The course will center on limits, derivatives and integrals. Definitions and applications of these topics will all be addressed. Pre-requisites: grade 10 SN or T&S math.

## **PSYCHOLOGY – SECONDARY 5**

The study of human behavior and mental processes. Studying psychology helps us to understand others and ourselves. Why do we think and act the way we do? What makes us tick? Through the study in this course, we will discover new ways to think about ourselves and ways to interpret and understand the behavior of others. We will examine why each individual is uniquely different and yet, in many essential ways, very similar.

## **SPANISH – SECONDARY 5**

The Spanish course is a beginner's course that is designed to introduce students to basic Spanish. We will explore specific themes, vocabulary, grammar and cultural content like Spanish music. It will be a laid back and fun initiation for any student interested in learning a new language. Vamos!

## **WORLD RELIGIONS OF TODAY – SECONDARY 5**

What do you believe in? Let's learn about humanity together. This course will focus on the common themes running through all religions of the world. Some of the religions to be discussed will be: Christianity, Islam, Judaism, Hinduism, Buddhism, Sikhism, Baha'ism, Zoroastrianism, Atheism and Indigenous religions. Students will compare and contrast the following topics in order to see the shared love of humanity that can be found in all religions; love of self, community, death, birth, marriage, prayer, charity, pilgrimage, etc. In this course, students will discover that religious diversity in society is a strength, rather than a weakness.