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February 2009

Dear Parents,

This Course Selection Handbook is a guide that has been created in order to help our students to make decisions about elective courses, and to understand, in brief, the course outline for the compulsory courses that they will need to take at each grade level.

There are several new elective courses described in the handbook, as well as a description of the new QEP courses, which include the Science Pathway at Secondary IV, the new “Ethics and Religious Culture” course at Secondary V, and the Contemporary World and Integrative Project course replacing our current Economics course. You will also find some new elective courses as well.

This handbook will help you to fill out the accompanying Course Selection Form. When your form is completed, please return it to the school as soon as possible.

We will be providing you with a hard copy of this handbook, as well as access to the handbook on our JRHS website. Next year, the handbook will appear on our JRHS website, however, as we are becoming more environmentally conscious, you will not receive a hard copy.

As always, should you have any questions regarding this process, please feel free to contact us at the school,
(514) 697-3210.

Sincerely,

Mrs. Nancy Sweer, Principal



Secondary III

Grade 9

COMPULSORY COURSES

ENGLISH

ENGLISH 316

At the Secondary III level students continue to experience language in a variety of forms. Short stories, novels, poetry, and drama as well as non-print text are read for comprehension and analysis. Students are encouraged to read widely and to use their reading to develop their own self-awareness. They are encouraged to think critically about their reading and about the world around them. They are asked frequently to express their thoughts and ideas through a variety of written forms.

Some Secondary III texts include: *A Raisin in the Sun*, *The Merchant of Venice*, *To Kill a Mockingbird* and *Death on the Ice*, *The Wave*, *Go Ask Alice* and *Define Normal*.

ENRICHED ENGLISH 336

The Secondary III Enriched English program is a challenging course offered to motivated students with above average English skills in writing, reading and speaking. Some English Secondary III texts: *Early September* (short stories); *Sunburst* (poetry); *The Giver*; *To Kill a Mockingbird*; *The Merchant of Venice*.

Prerequisite for this course is placement by Grade 8 teachers.

FRENCH

Parents are urged to do their utmost to foster a positive attitude towards the learning of French, and to provide opportunities to apply and reinforce, outside the school setting, the skills acquired in the classroom.

French marks are divided into three categories with one overall average mark.

The percentages used for the overall marks are as follows:

	Secondary III Second Language and Immersion	Secondary III <u>Enriched</u>
Interagir	33%	33%
Comprehension	33%	33%
Production	33%	33%

FRENCH SECOND LANGUAGE 314

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

This course is for those following a regular English path.

FRENCH IMMERSION 324

The emphasis is placed equally on reading, written, and oral expression in everyday situations related to the students' age, interests and needs. While oral proficiency is very important, students are also expected to

be able to express themselves adequately and correctly in written French.

ENRICHED FRENCH IMMERSION / SPANISH 344

French Content: This course provides challenging material and opportunities to use the French language to the student's maximum ability.

Spanish Content: This is the continuation of first level **SPANISH**. It provides basic vocabulary and main structure. This program is taught with the direct method of communication using the support of audio and videotapes.

Prerequisite: ***ENRICHED FRENCH IMMERSION 244 & teacher recommendation.***

MATH

Math Cycle II Year 1 (Grade 9)

Math Cycle 2 Year 1 (Grade 9)

Students in grade 9 will be exposed to several concepts in mathematics. Students are encouraged to start their reflection on their preferences, areas of interests and aptitudes in various mathematical topics.

General topics covered in grade 9 are:

Arithmetic
Real numbers
Algebra
Geometry
Statistics & probability

The evaluations will be competency based.

The student:

- 1) Solves a situational problems
- 2) Uses mathematical reasoning
- 3) Communicates using mathematical language.

HISTORY AND CITIZENSHIP EDUCATION **Histoire et éducation à la citoyenneté**

This compulsory course may be taken in English or in French. This course is year one of a two year program. The course will cover the history of Quebec from the First Occupants to Modern Quebec. The emphasis will be on the interpretation and analysis of social phenomena in a chronological way. The students will develop their critical thinking as a citizen. Students will learn how to read and interpret original text, various maps, graphs, statistical tables, pictures and diagrams.

PHYSICAL EDUCATION 312

The following is an overview of the aims presented in the program:

- ◆ *Development according to individual talents and abilities*
- ◆ *Promotion of an optimal level of physical fitness*
- ◆ *Development of good health habits*
- ◆ *Development of a positive attitude towards life-long, active participation in physical activities*

Various activities are involved, and could include: basic movement and warm-up exercises, track and field, gymnastics, basketball, volleyball, soccer, wrestling, badminton, softball and dance. A unit in Health Education will also be included. This is a half-year course.

SCIENCE PATHWAYS

Applied Science and Technology (Applied Education Path)

This is a yearlong course separated into three compulsory concepts:

The Technological World	The Living World	The Materials World
<ul style="list-style-type: none"> • Graphical Language • Mechanical Engineering • Electrical Engineering • Materials • Manufacturing • Biotechnology 	<ul style="list-style-type: none"> • Nutrition • Nervous and Muscular System • Reproduction 	<ul style="list-style-type: none"> • Properties of Matter • Changes in Matter • Organization of Matter • Fluids • Waves

Topics will be studied through a hands-on approach with an emphasis on their application to technology. Students will explore technological systems by deconstructing and analyzing the components. Students will be evaluated based on acquired competencies.

***PLEASE NOTE THAT STUDENTS TAKING APPLIED SCIENCE MUST TAKE POP (Personal Orientation Project), OR AUTO, (if available), AS THEIR ELECTIVE OPTION COURSE.**

Science and Technology (General Education Path)

This is a yearlong course separated into four compulsory concepts:

The Living World	The Material World	The Earth and Space	The Technological World
Cell Division Tissues, organs and systems Nutrition Nervous and Muscular System Reproductive System	Properties of Matter Changes in Matter Organization of Matter Fluids Waves	The Earth Space	Graphical Language Mechanical Engineering Materials Biotechnology

Topics will be studied through a hands-on approach with an emphasis on the scientific principles, laboratories and application of scientific theory to modern issues. Students will develop opinions with respect to the applications and limitations of science. Students will be evaluated based on acquired competencies.

Compulsory Arts Education Courses

***Please note that in Secondary III, the Compulsory Arts Courses will be given every other day for the full year. It will run opposite to the Elective Option Courses, which will also be given every other day for the full year.**

The Quebec Education Program now mandates that every Secondary III student take at least one Compulsory Arts Education Course. This course may be chosen from a specific list of courses, (Art, Music, Drama, and Dance), that are listed on the front of the Course Selection Form. These courses should not be confused with the Elective Courses that are listed on the back of that form. Here is a brief description of those courses:

Under the new QEP (Quebec Educational Program), study in the arts is compulsory. This regulation recognizes the important role the arts play in our society as an expression of our cultural identity. Courses in dance, drama, music and visual arts, will provide students with opportunities to create and perform their own material as well as expose them to the significant art of our culture.

COMPULSORY ARTS COURSES **SECONDARY III**

Students must choose one of the following Compulsory Arts Courses:

**ARTS STUDIO
DANCE STUDIO
DRAMA STUDIO
INSTRUMENTAL MUSIC STUDIO**

ELECTIVE CURRICULUM (OPTIONS)

Secondary III - Grade 9

Students must choose one of the following Elective Options

Please note that in Secondary III, it will be possible to take the same course as an Elective and as a Compulsory Option. In this way, it would be possible for a Secondary III student to have a Compulsory Arts Course every day instead of every other day.

ACTORS' STUDIO

SECONDARY III

This course is open to students in Secondary III, IV, and V who are passionate about theatre performance and want to be involved in the annual school production. Both actors and crewmembers are welcome in this class but must first audition and interview for the course. Students must be prepared to work outside the regular student timetable.

Prerequisite: *successful audition.*

ART STUDIO/ MULTI-MEDIA

SECONDARY III

Take your art a step further - explore new territory - in colour, shape and texture. Try your hand at larger modeling projects, using media and techniques you already know, plus some new ones. Get to know the art of famous artists from around the world. An emphasis is placed on drawing, printmaking and darkroom development.

COMPUTERS III

Secondary III offers an intermediate level of software such as Word, Excel, Spreadsheet and PowerPoint applications. Internet applications involve further development of Intranet Webpage creation and incorporating curriculum subject content.

DANCE

SECONDARY III

This course offers students the opportunity to explore several forms of dance, including Jazz, Hip-Hop, Ballet, Musical Theatre, Disco and Tap. Classes are structured and formal in nature, beginning with a warm-up, then moving on to isolations and progressions and ending with choreography. Please note that students will require appropriate dance foot wear.

DRAMA

SECONDARY III

Are you interested in people and do you think about why they do what they do? Transform your interest and understanding of people into theatre through role playing exercises and spontaneous improvisational games. Develop your ability to concentrate, to focus your energy and to express your ideas through voice and movement. This course will focus on character study and the dramatic monologue

GREEN

SECONDARY III

- To identify and discuss various environmental issues relevant to students.
- To develop and carry out local and global action plans to educate and promote JRHS as a Green school.
- To educate JRHS staff and students on green alternatives.
- To work in conjunction with the Green Team, Resource, Community office, Caretakers and Cafeteria staff to implement various green initiatives to meet the requirements to be certified as an *Etablissement Vert Brundtland* (EVB).

The course will include:

Research articles, debates, info sessions, community link assignment, environmental action project, field trips: McGill School of the Environment, Ecomuseum, Camping.

INTRODUCTION TO AUTO

SECONDARY III

Students will discover the principles of operation of gasoline engines and major automotive systems. Basic mechanical and body maintenance will be performed.

LEADERSHIP IN THEORY

SECONDARY III

This course will deal with the theoretical and practical applications of human relations. The time in the class will be split between classroom instruction and practical workshops acquiring and using the basic knowledge of leadership. Students will develop communication skills, organize and run events, demonstrate independent study and develop an understanding of their selves.

MUSIC III

SECONDARY III

This is a traditional Concert and Jazz Band Program. Students will learn to play a woodwind, brass or percussion instrument in a band setting. This is a dynamic and energetic course. Workshops, school trips, music competitions and concerts are all a part of the experience. Join the JRHS Music Department and become a member of the Junior or Senior Band.

PREREQUISITE: *Grade 8 Music or permission of instructor.*

PERSONAL ORIENTATION PROJECT (POP) SECONDARY III

The POP gives students the central role to explore, reflect and discover various fields that interest them by accessing pedagogical resources and actively trying out a variety of work functions. It is a process that starts early in a student's elementary school life through Guidance Oriented Approach to Learning activities. The development of their career identities carries on throughout their lives as a result of the foundation of new competencies they acquire through POP. The student: develops his/her own project on an individual basis and develops between three to eight career explorations processes by:

- using “tool kits”, consulting career resources, job shadowing, visiting educational institutions, etc.
- using a ministerial Web site offering a virtual resource library of specific tools such as experiential tools, virtual visits, key resource people

The student reflects on his/her career exploration and those of his/her classmates alone, with classmates, parents or other trusted people and considers hypothetical career paths

POTTERY

SECONDARY III

Discover clay and further your artistic expression in three-dimensional ceramic art and design. You will make both functional pottery and sculptures. Learn about the basic building methods to make anything you would like to make in clay. Apply colour to your work using a variety of glazing techniques. Contemporary and historical ceramic styles, techniques and artists will be studied in pottery class. You will have the opportunity to display your work in the new John Rennie Art Gallery.

ELECTIVE COURSES ARE OFFERED WHERE THERE IS SUFFICIENT REGISTRATION FOR THE COURSE. PLEASE NOTE THAT STUDENTS IN THE APPLIED SCIENCE COURSE WILL BE GIVEN PRIORITY FOR INTRODUCTION TO AUTO, SINCE IT IS PART OF THEIR PROGRAM. PLEASE ALSO NOTE THAT IF AUTO IS UNAVAILABLE TO APPLIED SCIENCE STUDENTS, THEY WILL BE SCHEDULED, AUTOMATICALLY, FOR THE POP COURSE, AS IT IS A MINISTRY REQUIREMENT FOR APPLIED SCIENCE.



Senior School

Secondary IV and V

Grades 10 and 11

At the end of Secondary IV, the Ministry of Education begins to issue report cards of its own (entitled *Relevé des notes*), which are mailed directly to the student's home in early July. *Advancement is based on success*. Students who do not pass will be required to write supplemental exams or repeat failed courses. Please note that the school report card in June is not always an indication of success in the course. It is the Relevé de notes which will indicate the mark.

COMPULSORY COURSES

ENGLISH –SECONDARY IV AND V

ENGLISH 416
ENGLISH 516*

SECONDARY IV
SECONDARY V

The Secondary IV and V English Language Arts program is designed to help students use language effectively, both in formulating their ideas and in communicating with others. To this end, students are given the opportunity to expand their use of language in a wide variety of listening, reading, speaking, writing and viewing situations. Students engage in:

- ◆ the process of responding to literature through the study of poems, short stories, novels, plays, non-fiction and media;
- ◆ the process of composing which allows students to explore an idea or topic through brainstorming or research, to organize and plan their writing, to draft and then revise their work, and to present their product for feedback and appraisal;
- ◆ the process of communicating through listening and speaking activities in informal class situations, such as small group discussions, as well as more formal individual and group presentations;
- ◆ the critical analysis of print and non-print media
- ◆ Preparation for Ministry of Education exam at the end of the Secondary V year.

ENRICHED ENGLISH 436
ENRICHED ENGLISH 536 *

SECONDARY IV
SECONDARY V

The enriched Secondary IV (436) course is offered to motivated and talented English students. Reading, writing and presentations by students demand more time and effort than the regular Secondary IV English workload. Students who are creative and reflective belong in the enriched program. It is less for the practical student and more for the abstract thinker. Some Secondary IV texts: *Catcher in the Rye, the Crucible, Night Dawn, Speak, Romeo and Juliet, Ender's Game, a Separate Peace, Theories of Relativity, Of Mice and Men and a Streetcar Named Desire.*

At the Secondary V (536) level, the course is designed for the advanced student. At this point, the course focuses on original and dynamic critical thinking above all else. Students are encouraged to show initiative beyond the boundaries of the course. Some English Secondary V texts could include: Hamlet, Othello, Slaughterhouse Five, The Power of One, East of Eden and Cider House Rules.

Prerequisite for ENRICHED ENGLISH 436 or 536: *The student must complete a letter to Ms. Brabant expressing why the student wishes to be considered for Enriched English. Placement in this course is also based upon teacher recommendation, the application letter and previous English Marks.*

FRENCH-SECONDARY IV AND V

French marks are divided into four categories with one overall average mark.
The percentages used for the overall marks are as follows:

	Secondary IV Second Language and Immersion	Secondary IV <u>Enriched</u>	Secondary V <u>All Levels</u>
Oral	25%	30%	25%
Written	25%	30%	25%
Listening	25%	10%	25%
Reading	25%	30%	25%

Secondary IV students who are taking the Advanced Science Package will be taking French only 4 periods out of the 6 day cycle. Secondary IV students who are taking the General Science and Applied Science Package will be taking French for 6 periods out of the 6 day cycle. The reason for this is that the Advanced Science Package, (which leads to Chemistry and Physics in Secondary V), will be given as 8 periods on the 6 day schedule. In Secondary V, French will be given 6 periods on 6 days.

Secondary v students will undertake a common year-end Ministry examination in French that they must pass in order to graduate from high school.

FRENCH SECOND LANGUAGE

SECONDARY IV

The overall aims of the course are to provide students with a solid foundation of the language which will allow them to participate in the professional, social and cultural life of their milieu, to enable students to communicate in everyday life situations which are meaningful to their age group and to develop in them a positive attitude towards the French language and culture. The students should be able to:

- ◆ Understand conversation on topics based on their needs and experience.
- ◆ Read communications on subjects of general interest.
- ◆ Express themselves orally and in writing on topics of general interest to them and within the range of their own experience.

This course is for those following a regular English path.

FRENCH IMMERSION

SECONDARY IV

This course is designed for students from Immersion classes. It is an enriched course, the objectives of which are to develop the mechanics of written expression, to improve oral communication.

FRENCH IMMERSION/SPANISH

SECONDARY IV

This course covers the normal Immersion objectives in half the time. Cinematographie is the medium for teaching the French component of this program. The other half of this course is **SPANISH**. Histoire is mandatory.

This course offered at this level is a continuation of **SPANISH** with greater emphasis on the written language, acquiring vocabulary, grammar and writing skills. Oral competence will improve through means of various activities centering on communication.

***Please note that students who are taking the Advanced Science Package, (which leads to Chemistry and Physics), will not have the Spanish component in their French class. The reason for this is that the French course for those students who are taking the Advanced Science Package will only be given for four periods on six days.**

Prerequisite: ENRICHED FRENCH IMMERSION/SPANISH III

FRENCH IMMERSION/ ADV. SCIPKG **SECONDARY IV**

This course will cover all of the objectives in the French Immersion Course with the exception of the Spanish Component. This course will be open only to those students who are accepted into the Advanced Science Package, (leading to Chemistry and Physics). It will meet 4 periods on six days in order to accommodate the 8 periods needed for the Advanced Science Course.

FRENCH SECOND LANGUAGE * **SECONDARY V**

Students completing this course will be able to express themselves on all subjects within their daily experiences. Class discussions center on content of the assigned texts, augmented with newspapers and radio programs. This course requires students to be able to write fairly accurately using the main structures of the French language. This course is for those following a regular English path.

FRENCH IMMERSION * **SECONDARY V**

This is a more advanced course offering a challenging study of the French language and culture. The main emphasis is on oral communication and written comprehension. Reading assignments include several short novels, short stories and newspaper articles.

Prerequisite: *FRENCH IMMERSION and teacher recommendation.*

ENRICHED FRENCH IMMERSION/ SPANISH **SECONDARY V**

This course is a continuation of the Secondary IV French/Spanish Course, with a greater emphasis placed on reading, writing, and an introduction to Hispanic culture. In addition, the students will receive an intensive preparation for the Ministry of Education final exam.

This advanced course is oriented towards a deeper comprehension of Quebec culture and its evolution. Students should be almost fluent in French, have a mature attitude and be able to work in groups without constant supervision. Some compulsory outings are also part of the curriculum. In addition, the students must cover the basic requirements for Grade 11 and take the final examination.

COMPULSORY ARTS EDUCATION COURSES **FOR SECONDARY IV and SECONDARY V** **STUDENTS**

Students in Secondary IV must choose one course from the following Compulsory Art Education Courses. Students in Secondary V must choose one Compulsory Arts Course and two Elective Options Courses. (The Elective Option Courses may include Chemistry and Physics)

The Quebec Education Program now mandates that every Secondary III student take at least one Compulsory Arts Education Course. This course may be chosen from a specific list of courses, (Art, Music, Drama, and Dance), that are listed on the front of the Course Selection Form. These courses should not be confused with the Elective Courses that are listed on the back of that form. Here is a brief description of those courses:

Under the new QEP (Quebec Educational Program), study in the arts is compulsory. This regulation recognizes the important role the arts play in our society as an expression of our cultural identity. Courses in dance, drama, music and visual arts, will provide students with opportunities to create and perform their own material as well as expose them to the significant art of our culture.

***Please note that the Compulsory Arts Course will be given as 4 periods on 6 days instead of 3 periods on 6 days. This will now mean that the Compulsory Arts Course will be a Full Year Course of 4 periods on 6 days.**

COMPULSORY ARTS COURSES FOR GRADE 10

ARCHITECTURAL DESIGN

SECONDARY IV

Students will be introduced to various phases of architectural planning and construction including surveying, site analysis, building components and terminology, construction methods, materials and costing, model construction and related trades and occupations.

ART STUDIO

SECONDARY IV

Learn the basic skills of drawing techniques. Understand colour theory and application. Create interesting compositions with various media disciplines such as print-making, collage and 3D projects.

DANCE STUDIO

SECONDARY IV

Students will continue to explore and develop expertise in various styles of dance.

DIGITAL PHOTOGRAPHY

SECONDARY IV

Students will explore the basics of digital photography covering the following topics - exposure (f stop, shutter speed, ISO), white balance, focusing, lighting and composition. The Photoshop aspect of the course will show the student how to manage digital images and manipulate them using cropping, colour adjustment, contrast adjustment and sharpness adjustment. Many other Photoshop functions will be explored and used in student portfolios.

Students will be expected to present their work to the class. They will also be expected to give and receive constructive criticism on photographic assignments.

Evaluation will be based on assignments and tests.

Students must have a 35mm digital camera (with manual capabilities) and a tripod. A 1G USB key would be an asset but not compulsory.

ACTORS' STUDIO **SECONDARY**
IV (Dramatic Literature and Performance)

This course is open to students in Secondary III, IV, and V who are passionate about theatre performance and want to be involved in the annual school production. Both actors and crew members are welcome in this class but must first audition and interview for the course. Students must be prepared to work outside the regular student timetable.

Prerequisite: successful audition

DRAMA STUDIO **SECONDARY IV**

Through experiences in playmaking, performance and stage directing, students will develop performance skills and techniques. Students will learn how to turn their ideas into drama, how to edit and structure scenes, and to analyze and present scenes from different periods of dramatic literature. Students will work with the media of both live theatre and cinema. They will develop an appreciation for theatre and its place in our culture. The course will culminate in a public performance.

INSTRUMENTAL MUSIC **SECONDARY IV**

This is a traditional Concert and Jazz Band Program. Students will learn to play a woodwind, brass or percussion instrument in a band setting. This is a dynamic and energetic course. Workshops, school trips, music competitions and concerts are all a part of the experience. Join the JRHS Music Department and become a member of the Junior or Senior Band.

PUBLIC SPEAKING AND DEBATING **SECONDARY IV**

This is a course in which students learn the principles of effective oral communication, argumentation and debate. They analyze contemporary problems and issues, research the topics and organize material for public delivery. All students do in-class debating and speech-making. Individuals will be selected to represent the school in debating competitions, model United Nations, and public speaking contests.

MATHEMATICS AT SECONDARY IV

MATHEMATICS IN SECONDARY IV

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. This recommended path would be the wisest choice for students to take, as it is clear that the teachers are most aware of the learning style and aptitude of the student.

Please note that a suggested placement letter will be sent to all students in Grade 9 during this semester. Please also note that successful completion of all three options will lead to acceptance into pre-university programs at CEGEP and that both the T&S and Science options will allow for entrance into CEGEP science programs.

The Math Courses have new names. They are as follows:

- Cultural, Social & Technical Math
- Technical and Scientific Math
- Science Math

Please see the following chart for a description of the courses

Cultural, Social & Technical	Technical and Scientific	Science
<p>This option provides students with tools that help them to <i>increase their capacity for analysis</i>, to consider different possibilities, to make informed decisions, to <i>support their reasoning</i> and to take a position with respect to various issues.</p> <ul style="list-style-type: none"> - consolidating and integrating knowledge in a variety of activities - hands on activities - exploration activities - games - research - presentations - debates - analysis of newspaper articles and advertising - interpreting reality as well as making generalizations, predictions, decisions - carry out concrete, practical activities - use technology to represent or process large amounts of data or relieve tedium 	<p>Students will continue to explore various topics in the T&S option in order to better understand its focus, to <i>use manual skills</i> and intellectual abilities associated, among other things, with the <i>operation of technical instruments</i>, and to make connections between mathematics and different occupations.</p> <ul style="list-style-type: none"> - 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. 	<p>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.</p> <p>This option emphasizes the modeling process.</p> <p>Students analyze a situation, a phenomenon or behaviour, and notice related patterns or trends. They interpolate, extrapolate and generalize. Students encounter situations that require them to use their knowledge of math <i>and</i> other subject areas. They work with purely mathematical contexts while continuing to deal with concrete situations, particularly of a scientific nature.</p>

MATHEMATICS AT SECONDARY V

Cultural, Social & Technical Math (504)

CS&T option is a continuation of the grade 10 program intended for students interested in social causes. It involves a greater use of statistics and discrete mathematics. Specifically, it prepares students for studies in the arts, communications, the humanities and the social sciences.

The main concepts pertaining to CS&T are:

- Algebra (system of first-degree inequalities in two variables)
- Geometry (equivalent figures, path, circuit)
- Statistics (conditional probability)

Technical & Scientific Math (506)

T&S option is a continuation of the grade 10 program intended for students interested in exploring situations that sometimes involve both manual and intellectual work. It requires students to identify the mathematical concepts and processes associates with the design of projects. This option prepares students for studies in technical fields related to nutrition, biology, engineering, business, etc.

The main concepts pertaining to T&S are:

- Algebra (real functions, system of first-degree inequalities in two variables)
- Geometry (equivalent figures, conics, vectors, metric relations in circles and triangles)

Science Math (506)

Sc. Option is a continuation of the grade 10 program intended for students interested in seeking to understand the origin of various phenomena. Its emphasis is on students' capacity for abstract thinking and performing more complex algebraic operations. Specifically, this option prepares students for studies in pure sciences where they may eventually specialize in research.

The main concepts pertaining to Science are:

- Algebra (real functions, system of first-degree inequalities in two variables)
- Geometry (equivalent figures, conics, vectors, trigonometric identities)

Entry into CEGEP requires successful completion of the following courses:

Math CS&T, T&S, or Science Math

SOCIAL SCIENCES AT SECONDARY IV AND V

HISTORY AND CITIZENSHIP

SECONDARY IV

Histoire et éducation à la citoyenneté

This compulsory course may be taken in English or in French. This is year two of a two-year program. The course will cover the history of Quebec using a thematic approach. The students will cover population and settlement, economy and development, culture and currents of thought, official power and prevailing powers. They will finish the year with an issue in society today. Using original texts, various maps, graphs, statistical tables, pictures and diagrams, the students will develop their critical thinking as a citizen.

ETHICS & RELIGIOUS CULTURE SECONDARY IV/V

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 light of their complementarities, 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. Ethical themes for Cycle 2 include, "The Future of Humanity" and "Justice". Religious Culture themes for Cycle 2 include, "Existential Questions" and "Religious Experience".

Please note that in Secondary IV, Ethics and Religious Culture will run in conjunction with the History Course. History Teachers will teach one term of Ethics, followed by 3 terms of History. In Secondary V, Ethics and Religious Culture will be integrated into the Secondary V English Course.

CONTEMPORARY WORLD

SECONDARY V

This is a compulsory for all Secondary V students, dealing with the history of Quebec since 1980. The influence that Quebec's history has had on the rest of the world will be explored in the program, as well as the influences that the rest of the world has had on Quebec.

INTEGRATED PROJECT

SECONDARY V

This project, integrated with the Contemporary World course, involves a study or project related to a world issue involving Quebec and the rest of the world.

SCIENCES AT SECONDARY IV AND SECONDARY V

SCIENCE PATHWAYS

Applied Science and Technology (6 Credits)

Students who take this course will not be able to take Chemistry and Physics. You must be eligible to take the Advanced Science Package in order to be eligible for Chemistry and Physics in Secondary V. This applied course this year will place more emphasis on the applications of energy and transportation technologies.

Topics:

Living World	Material World	Earth and Space	Material World
Dynamics of Ecosystems	Graphical Language Mechanical and Electrical Engineering Materials Manufacturing	Chemical Changes Electricity Electromagnetism Transformation of Energy Fluids Force and Motion	Lithosphere Hydrosphere Atmosphere Space

Students will use hands on approach and their knowledge to solve problems, they will analyze and understand the construction and inner workings of technical objects and technological systems. The course will emphasize the control of objects and systems and principles involved in maintenance and repair.

General Science and Technology (6 or 8 credits)

There will be 2 general courses given:

- Chemistry and Physics Preparatory Course (8 Credits)
- Required High School Leaving Course (6 Credits)

The required content for the two courses will be the same; the 8 credit course will have many enrichment topics for students interested in pursuing Chemistry and Physics in Secondary V. Students who take the 6 credit General Science course will not be able to take Chemistry and Physics.

Topics:

Living World	Material World	Earth and Space	Technological World
Ecology	Physical Properties of Solutions Organization of Matter Electricity Electromagnetism Transformation of Energy	Biogeochemical cycles Climate Zones Lithosphere Hydrosphere Atmosphere Space	Mechanical and Electrical Engineering Materials

Students will use hands on approach and their knowledge to solve problems, they will also explore the inner workings of technical objects and technological systems. They will conceptualize and apply what they have learned to deal with everyday issues and to make informed judgments.

PHYSICAL EDUCATION

SECONDARY IV

The following is an overview of the aims presented in the program:

- ◆ Development according to individual talents and abilities
- ◆ Promotion of an optimal level of physical fitness
- ◆ Development of good health habits
- ◆ Development of a positive attitude towards life-long, active participation in physical activities

Various activities are involved, and could include: basic movement and warm-up exercises, track and field, gymnastics, basketball, volleyball, soccer, wrestling, badminton, softball, dance, weight training and CPR. A unit in Health Education will also be given.

This course is compulsory at Secondary IV and is a 4-credit course. It is now also a compulsory course at Secondary V.

COMPULSORY ART COURSES FOR SECONDARY V STUDENTS

(All Secondary V students must choose one of these courses)

Please note that all Compulsory Arts Courses will be given 4 periods on 6 days for a full year.

ARCHITECTURAL DESIGN

SECONDARY V

Students will be introduced to various phases of architectural planning and construction including surveying, site analysis, building components and terminology, construction methods, materials and costing, model construction and related trades and occupations

ART STUDIO V

SECONDARY V

Learn the basic skills of drawing techniques. Understand colour theory and application. Create interesting compositions with various media disciplines such as print-making, collage and 3D projects.

DANCE STUDIO

SECONDARY V

A studio course for Grade 11 students in the basics of many dance genres. Beginners are welcome

DIGITAL PHOTOGRAPH

SECONDARY V

Students will explore the basics of digital photography covering the following topics - exposure (f stop, shutter speed, ISO), white balance, focusing, lighting and composition. The Photoshop aspect of the course will show the student how to manage digital images and manipulate them using cropping, colour adjustment, contrast adjustment and sharpness adjustment. Many other Photoshop functions will be explored and used in student portfolios.

Students will be expected to present their work to the class. They will also be expected to give and receive constructive criticism on photographic assignments. Evaluation will be based on assignments and tests.

Students must have a 35mm digital camera (with manual capabilities) and a tripod. A 1G USB key would be an asset but not compulsory.

DRAMA

SECONDARY V

Through experiences in playmaking, performance and stage directing, students will develop performance skills and techniques. Students will learn how to turn their ideas into drama, how to edit and structure scenes, and to analyze and present scenes from different periods of dramatic literature. Students will work with the media of both live theatre and cinema. They will develop an appreciation for theatre and its place in our culture. The course will culminate in a public performance.

INSTRUMENTAL MUSIC

SECONDARY V

This is a traditional Concert and Jazz Band Program. Students will learn to play a woodwind, brass or percussion instrument in a band setting. This is a dynamic and energetic course. Workshops, school trips, music competitions and concerts are all a part of the experience. Join the JRHS Music Department and become a member of the Junior or Senior Band

PUBLIC SPEAKING AND DEBATING

SECONDARY V

This is a course in which students learn the principles of effective oral communication, argumentation and debate. They analyze contemporary problems and issues, research the topics and organize material for public delivery. All students do in-class debating and speech-making. Individuals will be selected to represent the school in debating competitions, model United Nations, and public speaking contests

ELECTIVE COURSES FOR SECONDARY V STUDENTS

Students in Secondary V who are not taking Chemistry and Physics will have the opportunity to take 2 elective courses and one Compulsory Arts course. Students who are taking Chemistry and Physics must choose from one Compulsory Arts Course. The Chemistry and Physics will count for the two Elective Options. Listed below are the Secondary v. Elective Option Courses.

ACTORS' STUDIO
(Dramatic Literature and Performance)

SECONDARY V

This course is open to students in Secondary III, IV, and V who are passionate about theatre performance and want to be involved in the annual school production. Both actors and crew members are welcome in this class but must first audition and interview for the course. Students must be prepared to work outside the regular student timetable. This course includes enriched English.

Prerequisite: successful audition

ADAPTIVE PHYSICAL EDUCATION
(INTEGRATED PHYSICAL EDUCATION)

SECONDARY V

This specialized course is for students who would like to learn how to work with students with Special Needs, as well as for students with Special Needs. The activities are geared for students as mentors and as helpers. It is also a course that allows students to interact together in adaptive Physical Education games.

AUTO MECHANICS

SECONDARY V

This course introduces students to the principles of the internal combustion engine and the automobile, emphasizing the cooling and lubricating systems with practical work involving engine repairs and servicing.

Students will be instructed in oxyacetylene and electric welding.

BASIC ELECTRONICS

SECONDARY V

This course will introduce students to electronics, one of the fastest growing high-tech fields of our century. Through a theoretical and hands-on approach using a multitude of components and devices, students will explore the fascinating world of electricity and solid-state electronics. This captivating program will present electricity, basic electronic components, semiconductors, photonic semiconductors, as well as digital and linear integrated circuits. Through demonstrations and basic circuit design and assembly, students will demystify the wonderful world of electronics.

BIOLOGY

SECONDARY V

This is open to Secondary IV and V students. It involves extensive student participation in discussion, experimentation, and analysis. The course provides a general knowledge of biology, develops problem-solving skills, and is an excellent preparation for further biological studies. The following topics are included in this course: ecology; taxonomy; evolution; origin of life; biochemistry; cell structure; life processes, and genetics.

CHEMISTRY

SECONDARY V

This course is intended for those students who will study Chemistry at the CEGEP level (i.e. Pure and Applied Science or Health Sciences). Included will be a study of:

- ◆ Energy effects in chemical reactions
- ◆ Kinetics
- ◆ Equilibrium
- ◆ Solubility
- ◆ Acids and bases
- ◆ Oxidation – reduction
- ◆ Kinetic molecular theory of gases

COMPUTERS

SECONDARY V

A multi-media orientation to the use of computer technology

ECONOMICS

SECONDARY V

The course enables students to acquire a basic knowledge of economic theory and the challenges of a global economy. Part of the evaluation is a term paper that allows students to visit a corporation and interview an entrepreneur or an employee of that company. This will give students the experience to see what skills and challenges are required in our present day economy.

ENTREPRENEURSHIP

SECONDARY V

Entrepreneurs bring a spirit of innovation to an economy and to its society. As Canada faces the challenge of an increasing competitive world, this spirit of innovation becomes more essential. This “hands-on” course will allow students to set up and run their own businesses. Students should be prepared to work within the community and learn the necessary skills to make their venture a success.

HUMAN RELATIONSHIPS

SECONDARY V

The purpose of this course is to help students understand relationships and conflict. It will help them explore their own personal values for friendship and courtship and help them decide what is most important to them. Another component of the course will center upon various sexual health related issues. This will include sexual orientation, gender issues and sexism. We will also discuss sexuality within various cultures and religions, and personal values that people hold as a result. Furthermore, the history of how sexuality was perceived in various societies to uncovering our own modern day perceptions, which is strongly influenced by the media. The course will help students decipher sexual messages they receive in the media, and will analyze how this influences their ideas regarding sex and sexuality.

INTEGRATED MUSIC, ARTS DISCIPLINE SECONDARY V

This is a course that would enable students with Special Needs and those students who might be considering a career in child-care, social work, education or health care to experience music and art therapeutically and as a therapeutic tool. Students participating in this course would be involved in inclusive music and art creations and activities. Students would learn the basics of an instrument appropriate to their abilities and be part of adaptive and therapeutic music and art projects and themes.

**INTRODUCTION TO LAW and
THE CHARTER of RIGHTS SECONDARY V**

This course will introduce students to their rights and obligations as defined by the Canadian Charter of Rights and the Quebec Charter of Rights. The course will stress such rights as:

- ◆ Basic Rights and Freedoms
- ◆ Consumer Rights
- ◆ Tenant's Rights
- ◆ Young Offenders Rights

This course will be a hands-on course using real life cases. Visits by lawyers and judges will help students to better understand the justice system.

JOURNALISM SECONDARY V

This course prepares students to face the challenges of professional journalists. They examine techniques for information gathering, plus writing and editing techniques relevant to **publicationMI evolves** around the making of magazines and the print medium. Journalism takes on the video and radio mediums, and our ties with CFCF and some radio stations around Montreal are further explored.

LEADERSHIP THROUGH STUDENT LIFE SECONDARY V

This is a course open to Secondary V students. This course is designed to help students acquire the tools they will need to be active leaders in their community. Students enrolled in this course will be expected to involve themselves in:

- ◆ The school's Governing Board
- ◆ Organizing and running a major school activity
- ◆ A community-based event
- ◆ Fundraising activities for Student Life
- ◆ Promoting the Student Life Program

The teaching approach will combine lectures and independent project work. Active student participation and collaboration is encouraged.

LIVING ON YOUR OWN SECONDARY V

This course provides students with an informative and motivational approach to living on one's own. The outline would include personal budgeting, savings, investing, lodging, shopping wisely and preparation of a weekly menu. It would also include career options and career choices. The second part of the course would allow students in a virtual world travel to explore different countries to learn about the people, the culture, and the historical sites to visit.

PEER TUTORING SECONDARY V

This program is an elective; in which students assist individual teachers in a course, which they teach. This may be done in any subject (i.e. Math, Phys. Ed., Option, etc.). Usually this work is done with students who are younger than the Peer Tutor. As well, many Peer Tutors work in the Resource Room. This course is an excellent opportunity for students to find out if teaching is a viable option for them. All applicants to be a Peer Tutor must be approved by the Guidance Department. Dependability, maturity and knowledge of the subject area are the pre-requisites for this course.

PHYSICS

SECONDARY V

This Physics course is for those students who plan to study Pure and Applied Science or Health Sciences at the CEGEP level. Topics include:

- **Optics:** The study of the behaviour of light. Students investigate transmission, reflection, and refraction of light, and explain the operation of lenses and mirrors and many devices that use them.
- **Mechanics:** The study of motion of objects and the forces that make them move. Students explore the relationship among forces, work, energy and power by experimentation with simple machines.

PSYCHOLOGY

SECONDARY V

This is an introduction course to the study of Psychology. The aim of the course is to introduce students to the study of behaviour and mental processes, as well as, the major fields within Psychology. Students will be encouraged to make connections between their own lives and material studied.

THE SCIENCE OF COOKING AND FOOD

SECONDARY V

This course will discuss the various nutritional components of food not covered in the Secondary 3 Science program. It will further the student's knowledge of the importance of proper eating in helping the body to combat cancer in its initial stages. The student will be able to make healthy choices of food and gain knowledge of scientific studies that have shown the link between poor eating habits and bad health. Another component of the course will involve learning simple recipes, meal planning and preparation to incorporate the knowledge gained in the theoretical part of the course. Students will learn how to prepare nutritious meals in the home economics room.

THE STUDY OF SCIENCE FICTION

SECONDARY V

This is a course that will focus on the genre of science fiction. Student's will examine the different media of science fiction such as novels, short stories, television, movies, comics and radio. This course will focus on:

- The historical context of the science fiction writer.
- The underlying political, social, economic and scientific messages throughout the genre.
- The creativity and science in science fiction.

Generally the class will focus on classic examples of science fiction in all its forms. Students will be given opportunity to bring in their own specific areas of interest and will be encouraged to discuss them with the class. Students will be expected to participate in class discussion, express their opinions in written form and complete a term project each term.