

KENNEBECASIS VALLEY HIGH

COURSE DESCRIPTIONS

2019-2020



Fortune Favours the Daring

HOME OF THE CRUSADERS

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GRADUATION REQUIREMENTS

New Brunswick High School Graduation Requirements 2019 – 2020

☐ **Minimum 17 credits which include the following 7 compulsory courses:**

- ✓ English grade 11 (**2 credits**)
- ✓ English grade 12 (**1 credit**)
- ✓ Financial and Workplace Mathematics 11 **or** Foundations of Mathematics 11 (**1 credit**)
- ✓ Modern History grade 11 (**1 credit**)
- ✓ Science (**1 credit**) from:
 - Biology Chemistry
 - Human Physiology 110
 - Introduction to Environmental Science 120 Physics
 - Physical Geography 110
 - Robotics and Automated Technology 120 Introduction to Electronics 110
 - Micro Electronics 120
 - Auto Electrical Systems 120,
- ✓ Fine Arts/Life Role Development (**1 credit**) from:
 - Career Explorations 110
 - Cooperative Education 120
 - Entrepreneurship 110
 - Fine Arts 110
 - Graphic Art & Design 110
 - Individual and Family Dynamics 120
 - Music 112/112/122/120
 - Nutrition and Healthy Living 120
 - Outdoor Pursuits 110
 - Physical Education Leadership 120
 - Reading Tutor 120
 - Theatre Arts 120
 - Visual Arts 110/120
 - Wellness through Physical Education 110

☐ **Students must have an English 12 and a minimum of four other credits at the grade 12 level.**

☐ **Students must meet the requirements of the prescribed common curriculum of the 9/10 program as outlined in the *Grades 9/10 Companion Document* (completing Information Technology outcomes satisfies the Computer Literacy requirement).**

☐ **Success on the English Language Proficiency Assessment (ELPA) is required.**

Students must acquire a literacy credential by achieving acceptable or better on the ELPA in grade 9. Students who are unsuccessful can rewrite in their grade 11 and 12 year. Candidates are provided further support in grade 11 and 12.

☐ **Students must successfully complete either the Post Intensive French (PIF) or French Immersion Language Arts (FILA) course at the grade 10 level.**

☐ **Students must complete the two grade 10 Mathematics courses.**

THE FOUR YEAR HIGH SCHOOL

Grade 9	Grade 10	Grade 11	Grade 12
English (year)	English (year)	English 11 (2 credits)	English
Math (year)	Geometry, Measurement and Financial Math 10	Math 11 (1 credit)	Elective
Post Intensive French	Numbers Relations & Functions 10	Science	Elective
Social Studies	Post Intensive French	Modern History 11	Elective
Science	Social Studies	Fine Arts/Life Role*	Elective
Four 45-hour courses in BBT- Broad Based Technology, Health & Physical Education, Music and Visual Arts	Science	Elective	Elective
	One 90-hour course in BBT 10, Hlth & Phys Ed 10, Music 10 & Visual Arts 10	Elective	Elective
	Two 45-hour courses in BBT, Hlth & Phys Ed, Music and Visual Arts	Elective	Elective
	Elective	Elective	Elective
			Elective

* Fine Arts/Life Role Development Cluster

CO-OP Ed 120
 Entrepreneurship 110
 FI/FSL Individual and Family Dynamics 120
 Fine Arts 110
 Graphic Art and Design 110
 Individual and Family Dynamics 120
 Music 11
 Music 12
 Outdoor Education 110
 Physical Education Leadership 120 (or FI equivalent)
 Reading Tutor 120
 Theatre Arts 120
 Visual Arts 110/120
 Wellness through Physical Education 110

Certificate of Second Language Proficiency

The Grade 12 French Oral Proficiency Interview is mandatory for all Grade 12 Post Intensive French students registered in at least one French course, as well as all Grade 12 French Immersion students registered in at least a total of 5 courses while in Grades 11 and 12. The assessment fee is waived for these students. Although it is mandatory for these students only, other Grade 12 Anglophone students registered in a French second language course may participate in the oral proficiency interview in order to obtain their French oral proficiency certificate. Students who are not in Grade 12, not enrolled in a French second language course or course offered in French, or francophone students, do not participate in the oral proficiency interviews. The fee is \$60 for other students who wish to be assessed. The certificate states that the student has achieved a level of proficiency as defined by the EEC. Students demonstrate mastery of spoken French in a face-to-face situation with a trained language interviewer.

The interview assesses pronunciation, grammatical accuracy, vocabulary, fluency, and listening comprehension. It produces a single, overall language proficiency score based on a scale from “Not Ratable” to “Superior”. Some levels may have a plus which indicates that proficiency is higher than the level shown, but not high enough to warrant the next level.

Language Proficiency Levels:

Not Ratable: Demonstration of functional ability in the language is nil.

Novice: Student can satisfy immediate needs using rehearsed phrases. No real autonomy of expression, flexibility or spontaneity. Can ask questions or make statements with reasonable accuracy **only** with memorized phrases or formulae. Vocabulary is limited to areas of immediate needs. Attempts at creating speech are usually unsuccessful.

Basic: Some creation with language is evident. Student can satisfy minimum courtesy requirements and maintain very simple face-to-face interaction with native speakers used to dealing with second language learners. Almost every utterance contains fractured syntax and grammatical errors. Vocabulary is adequate to express most elementary needs.

Basic Plus: Student can initiate and maintain predictable face-to-face conversations and satisfy limited social demands. Shows spontaneity in language production, but fluency is very uneven. Range and control of the language is limited.

Intermediate: Student can satisfy routine social demands and limited work requirements; handles most social situations with confidence but not with facility. These include introductions and casual conversations about current events, as well as work, family and autobiographical information, can give directions from one place to another. Has a speaking vocabulary enough to respond simply with some circumlocutions; accent, though often quite faulty, is intelligible; can usually handle elementary constructions quite accurately but does not have thorough or confident control of grammar. In complex situations, language usage generally disturbs the native speaker.

Intermediate Plus: Student is able to satisfy most work requirements and show considerable ability to communicate on concrete topics relating to particular interests and special fields of competence; often shows remarkable fluency and ease of speech, yet under tension or pressure language may break down; generally strong in either grammar or vocabulary but not both; normally controls general vocabulary with very little groping for every day words; participates in most formal and all informal conversations on practical, social and professional topics, although comprehension may be faulty at times.

Advanced: Able to speak the language with enough structural accuracy and vocabulary to participate effectively in most formal and informal conversations on practical, social and professional topics. Knowledge of vocabulary is broad enough that the speaker rarely must grope for a word; accent may be obvious. Control of grammar good; errors virtually never interfere with understanding and rarely disturb the native speaker. Comprehension is quite complete.

Advanced Plus: Able to speak the language with enough structural and lexical accuracy that participation in conversations in all areas poses no problem. Accent is still faulty, and the speaker occasionally exhibits hesitancy, which indicates some uncertainty in vocabulary or structure.

Superior: Able to use the language fluently and accurately on all levels normally pertinent to professional and participate in any conversation within the range of personal and professional experience with a high degree of fluency and precision of vocabulary. Accent is good, but the speaker would rarely be taken for a French first language speaker.

PATHWAYS FOR UNIVERSITY

Students planning to apply to a university upon high school graduation should carefully select courses for grades 11 and 12. This applies particularly to the 121/ 122 or 120 courses. It is important for students to confirm that specific subjects are accepted as entrance credits at their chosen universities.

Students must also make certain they complete enough of these entrance credits. It is imperative to check with selected universities. A general guideline is a minimum of five such credits for Maritime universities and a minimum of six for Ontario universities. It is an excellent idea to have at least one more acceptable credit than the required minimum.

The following chart is intended to give students and parents **examples** of which high school subjects satisfy admission requirements to selected university programs. **These are only suggestions.** University admission requirements will vary among institutions. Always refer to the university website or calendar or consult your high school guidance counselor.

Please consult the selected university when considering the following electives:

Business Org. & Man. 120	Law 120
Computer Science 120	Media Studies 120
Coop Ed 120	Music 120
Enviro Science 122	PE Leadership 120
FI World Issues 120	Theatre Arts 120
Int. to Accounting 120	Visual Arts 120
Journalism 120	World Issues 120

Canadian universities typically accept these electives:

Biology 121/122	FI Canadian History 120
Calculus 120	FI Language Arts 120
Canadian Geography 120	Foundations of Mathematics 120
Canadian History 120	French 122
Canadian Literature 120	Physics 121/2
Chemistry 121/2	Political Science 120
Economics 120	Pre-Calculus 120 A/B

Degree	Required Courses
Arts (BA)	English 121/2
Science (BSc)	English 121/2, Pre-Calculus A120/B120, Two out of Biology 12, Physics 12, Chemistry 12 (UNB requires Chemistry 12 and one other provincially approved grade 12 Science course)
Commerce (B. Com) Business Admin(BBA)	English 12, Foundations of Mathematics 120 or Pre-Calculus A120
Engineering (BEng)	English 121/122, Pre-Calculus A120/B120, Chemistry 12, Physics 12
Nursing (BN)	English 121/122, (UNB, for example, requires Pre-Calculus 110 or Foundations of Mathematics 120, Chemistry 12, Biology 12)
Computer Science (BCSc)	English 121/2, Pre-Calculus A120/B120, (UNB requires Chemistry 12 or Physics 12)
Fine Arts (BFA)	English 121/2, (Art portfolio or music audition is usually required.)

GRADE 9/10 SUBJECTS

The four years of high school, referred to as “The High School Program”, consists of two basic units, the 9/10 program and the 11/12 program. The basic core of skills, knowledge, competencies and experiences necessary for future learning’s in the 11/12 program and beyond is the central focus of public education from kindergarten to grade ten. The distinguishing features of grade nine are the common curriculum, heterogeneous grouping, scheduling by classes or teams and student promotion decided by teachers/the teaching team on an all or nothing basis. Grade ten is defined by the opportunity for some curriculum choice, heterogeneous grouping in some subjects with the option to ability group in others, teaming where possible, and promotion by subject.

The following general descriptions outline the course of studies in each year:

GRADE 9

ENGLISH LANGUAGE ARTS 9 (180 hours)

The curriculum focus for this course is reading, writing, speaking, listening and thinking. Students develop their ability to write clear sentences, paragraphs, and essays and provide personal responses and analyses. Short stories, novels, poetry, and drama are the genres for achieving academic outcomes. Students are introduced to the world of Shakespeare. A provincial literacy assessment is written and is a graduation requirement.

MATH 9/FI MATH 9 (180 hours)

This is a full year course that includes the following topics: square roots and surface area, powers and exponent laws, rational numbers, order of operations, linear relations and graphing, polynomials, solving linear equations and inequalities, similarity and transformations, circle geometry, and more.

Note: Grade 9 students who are strong in mathematics and who are interested in taking Calculus in their Grade 12 year should request for *Geometry, Measurement and Finance 10, Numbers, Relations and Functions 10 and Foundations 11* for their Grade 10 course requests. In this case their Grade 10 schedule should have in Semester 1: GMF 10 and NRF 10 and in Semester 2: Foundations 11. Marks should be above 70 % and will be confirmed. Students who are interested in this option should choose 2 electives: Foundations 11 + one other.

PERSONAL DEVELOPMENT AND CAREER PLANNING 10

Write up coming soon!

SCIENCE 9/FI SCIENCE 9 (90 hours)

The Science 9 course is designed to offer students an opportunity to learn about the varied disciplines of science. The course is divided into two components. They include: Reproduction and Space Exploration. There will be a greater emphasis on science skills.

SOCIAL STUDIES 9 (90 hours) & FI SOCIAL STUDIES 9 (90 hours)

In this course students investigate our Canadian identity and its personal significance for them. Within a project-based approach appropriate for social studies learning, students investigate the many peoples, identities, histories and the geography that make up our diverse country. Students are exposed to a variety of different media including video and multimedia information.

POST INTENSIVE FRENCH 9 PIF 9 (90 hours)

This course will develop student’s basic conversational skills. This is a continuation of the Middle School program. Emphasis is placed on speaking and listening skills. Therefore, students will be expected to participate actively in

the classroom sessions (dialogues, role playing and group work). This course covers the language skills necessary for effective communication in French in daily situations.

FI LANGUAGE ARTS 9-EARLY & LATE (90 hours)

This course is open to students who have completed the Early and Late Immersion Programs at the Middle School level. This course will deal with the following aspects: vocabulary, oral expression, composition, literature and culture. Early F.I. Language Arts students will delve more deeply into French vocabulary and grammar.

SPECIALITIES

Students may spend approximately 45 hours studying each of the following: BBT-Broad Based Technology 9, Health & Physical Education 9, Music 9 and Visual Arts 9.

GRADE 10

ENGLISH LANGUAGE ARTS 10 (180 hours)

The curriculum focus for this course is reading, writing, speaking, listening and thinking. Students continue developing their ability to write clear sentences, paragraphs, and essays. Short stories, novels, poetry, and plays are the genres for achieving academic outcomes. A Shakespearean play may be studied.

GEOMETRY, MEASUREMENT AND FINANCE (GMF 10) and FI GMF 10

This is a one semester course that includes the following topics: unit pricing and currency exchange, earning an income (net income, deductions), financial services (such as choosing an account, simple and compound interest, credit cards), surface area, volumes, angles and parallel lines, and right triangular trigonometry.

NUMBERS, RELATIONS AND FUNCTIONS (NRF 10) and FI NRF 10

This is a one semester course that includes the following topics: factors and multiples of whole numbers, perfect squares and cubes and their roots, common factors of a polynomial, factoring, irrational numbers, mixed and entire rationales, fractional and negative exponents, relations and functions, graphs, linear functions, systems of linear equations.

Students must obtain credit in GMF 10 and NRF 10 and must obtain credit in either Financial and Workplace Mathematics 110 or Foundations 110. These are graduation requirements.

SOCIAL STUDIES 10/FI SOCIAL STUDIES 10

Students will be introduced to the cultural foundations of our society through the study of the development of western civilization in the ancient and medieval periods. Specific topics include ancient Greece, ancient Rome, medieval Europe, and the Renaissance and Reformation.

SCIENCE 10/FI SCIENCE 10

This course provides equitable opportunities for all students according their abilities, needs and interests. The Science 10 course is designed to offer students an opportunity to learn about the varied disciplines of science. The course is divided into two components. They include: Chemical Reactions and Motion. There will be a greater emphasis on science skills.

POST INTENSIVE FRENCH 10 (PIF 10)

This course is designed to develop students' basic conversational skills in French. The four linguistic abilities are used: oral and reading comprehension and oral & reading production. However, more emphasis is placed on developing the speaking and listening skills. Therefore, students will be expected to participate actively in

classroom sessions (dialogues, role playing and group work). This course covers the language skills necessary for effective communication in French in daily situations.

FI (EARLY) LANGUAGE ARTS 10

This course emphasizes communication in order to foster growth of the language skills: listening, speaking, reading, and writing. It encourages the use of the language as a vehicle for communication and reflection, and as a factor in the student's personal development. It will also increase the student's cultural knowledge and experience. This course will deal with the following aspects: vocabulary, oral expression, composition, literature and culture.

FI (LATE) LANGUAGE ARTS 10

This course emphasizes communication in order to foster growth of the four language skills as well as increase the student's cultural knowledge and experience. This course emphasizes the use of the language as an instrument for communication and reflection, and as a factor in the students' personal development. The course deals with the following aspects: vocabulary and oral expression, literature, composition, and culture.

BROAD BASED TECHNOLOGY 10

(Offered as a 45hr and as a 90hr)

This course is for grade 10 students only. This course builds on skills developed in grade 9 B.B.T. Students explore computer graphics, animations, digital imaging, digital audio and web publishing. Students develop computer-based projects.

HEALTH & PHYSICAL EDUCATION 10

(Offered as a 45hr and as a 90hr)

The purpose of this course is to provide an in-depth knowledge of skills and strategies in various physical recreation activities

MUSIC 10

(Offered as a 45hr and as a 90hr)

Emphasis will be placed on both the practical aspect of music – performing in solos and ensembles and theory, ear training, and music history/appreciation. The aim of this course is to help develop well-rounded knowledgeable individuals and competent musicians of the high school level.

Students wishing to enroll in the 90-hour offering of Music 10 have two options:

Option A: Students may continue an in-depth study on an instrument they own or voice. Students on any instrument are welcome to take this course but must have the same level of proficiency as the level reached on piano in Music 9. Students will perform on that instrument or vocally throughout the semester.

Option B: Students may study guitar. All levels of guitarists are welcome in this course from beginner to advanced. Students will perform on guitar (at their level) throughout the semester. Students will be expected to provide their own guitar for this course.

VISUAL ARTS 10

(Offered as a 45hr and as a 90hr)

This course is the foundation course for art and design. It introduces students to a variety of art materials, techniques and concepts. The course explores the basic elements of line, shape, texture, colour and value through a series of drawings, painting, printmaking or sculpture projects. Throughout the course students are encouraged to discuss, analyse and evaluate their own work and that of others.

GRADUATION YEARS: GRADES 11 AND 12 COURSES

<u>ENGLISH</u> ELA 111/112/113 ELA 121/122/123 JOURNALISM 120 LEARNING STRATEGIES 110/120 MEDIA STUDIES 120 READING TUTOR 120 WRITING 110 AP ENGLISH LITERATURE 120	<u>HEALTH & PHYS ED</u> NUTRITION FOR HEALTHY LIVING 120 OUTDOOR EDUCATION 110 PHYS ED LEADERSHIP 120/ WELLNESS THROUGH PHYS ED 110 YOGA 110	<u>FINE ARTS</u> DANCE 110 GRAPHIC ART & DESIGN 110 MUSIC 111/112 MUSIC 122 MUSIC 120 THEATRE ARTS 120 VISUAL ARTS 110 VISUAL ARTS 120
<u>FAMILY STUDIES</u> CHILD STUDIES 120 EARLY CHILDHOOD SERVICES 110 FAMILY LIVING 120 FI RELATIONS FAMILIALIES 120	<u>SECOND LANGUAGE</u> FRENCH 111/FRENCH 112 FI (EARLY) LANGUAGE ARTS 110 FI (LATE) LANGUAGE ARTS 110 FRENCH 121/FRENCH 122 FI (EARLY) LANGUAGE ARTS 120 FI (LATE) LANGUAGE ARTS 120 FI BIOLOGIE 112 FI CANADIAN HISTORY 12 FI CANADIAN GEOGRAPHY 120 FI FOUNDATION OF MATH 110 FI MEDIA STUDIES 120 FI PHYSIQUE 112 FI PHYS ED LEADERSHIP 120 FI PRE-CALCULUS 110 FI RELATIONS FAMILIALIES 120 AP FRENCH 120 SPANISH 110/SPANISH 120	<u>INFORMATION, COMMUNICATION, TECHNOLOGY & DESIGN AND TRADES</u> AUTOMOTIVE ELECTRICAL SYS 120 BUSINESS ORG & MAN 120 COMP AIDED DSGN 110 (CAD 110) COMP SCIENCE 110/120 COOPERATIVE EDUCATION 120 CULINARY TECHNOLOGY 110/120 DIGITAL PRODUCTIONS 120 DISTANCE EDUCATION 120 ELECTRICAL WIRING 110 ENTREPRENEURSHIP 110 FASHION DESIGN 120 FRAMING & SHEATHING 110 HOSPITALITY & TOURISM 110 HOUSING & INTERIOR DESIGN 120 INFORMATION TECHNOLOGY 120 INTRNL COMBUSTION ENGINES 110 INTRO TO ACCOUNTING 120 INTRO TO APPLIED TECHNOLOGY 110 INTRO TO ELECTRONICS 110 METALS FABRICATION 110 WELDING METALS PROCESSING 110 METALS PROCESSING 120 MICRO ELECTRONICS 120 MILL AND CABINET WORK 120 POWER TRAIN AND CHASSIS 110 RESIDENTIAL FINISH 120
<u>MATH</u> FINANCIAL & WORKPLACE MATH 110 FINANCIAL & WORKPLACE MATH 120 FOUNDATIONS OF MATH 110/120 FI FOUNDATIONS OF MATH 110 PRE-CALCULUS 110 FI PRE-CALCULUS 110 PRE-CALCULUS A 120 PRE-CALCULUS B 120 CALCULUS 120 AP CALCULUS AB 120 AP STATISTICS 120	<u>SCIENCE</u> BIOLOGY 11 / FI BIOLOGY 112 BIOLOGY 113 BIOLOGY 121/122 CHEMISTRY 111/112 CHEMISTRY 121 /122 INTRO TO ENVIRO SCI 120 PHYSICS 111 PHYSICS 112/ FI PHYSICS 112 PHYSICS 121/122 AP BIOLOGY 120 AP CHEMISTRY 120 AP PHYSICS 1 120 AP PSYCHOLOGY 120	<u>SOCIAL STUDIES</u> AP EUROPEAN HISTORY 120 AP HUMAN GEOGRAPHY 120 CANADIAN HISTORY 122 ECONOMICS 120 FI CANADIAN HISTORY 122 FI MODERN HISTORY 112 GENDER STUDIES 120 LAW 120 MODERN HISTORY 112/113 NATIVE STUDIES 120 POLITICAL SCIENCE 120 SOCIOLOGY 120 WORLD ISSUES 120

COURSES WRITTEN IN RED ARE LOCALLY DEVELOPED COURSES AND MAY NOT BE OFFERED ELSEWHERE. STUDENTS ARE ONLY ALLOWED TO COUNT TWO FOR GRADUATION CREDITS.

ENGLISH COURSES

In order to graduate, students must successfully complete an English course at each grade level. In Grade 11, students have the option of taking English Language Arts 111, 112, or 113. This choice continues in Grade 12 with English Language Arts 121, 122, and 123. Students planning to attend university and certain college programs must complete 111 or 112 and 121 or 122. Students planning to enter the workforce immediately after graduation or who plan to attend certain college courses and who do not plan to attend university may take 113 and 123. Students may wish to consult their guidance counsellor as to which Grades 11 and 12 English courses they should take. Please note prerequisites for individual courses in the course descriptions.

ENGLISH LANGUAGE ARTS 111

Prerequisite: English Language Arts 10

This course is designed for students whose aptitudes and interests in language and literature are above average. While English Language Arts 111 meets the same goals as English Language Arts 112, this course also provides an enriched variety of experiences, texts, and ideas to challenge students to a greater range and depth than English Language Arts 112. To suit students' interests and abilities, this course progresses at a faster pace and students are expected to work more independently and to take more responsibility for their studies than in English Language Arts 112. Strong reading and writing skills are essential for success in this course.

ENGLISH LANGUAGE ARTS 112

Prerequisite: English Language Arts 10

This is the regular college preparatory course for students who plan to attend university or college. Students will study novels, plays (including a Shakespearean play), and poetry. Students will also develop their sentence, paragraph, and essay writing skills. Students will also focus on information and media literacy.

ENGLISH LANGUAGE ARTS 113

Prerequisite: English Language Arts 10.

This course is for students who wish to enter the workforce after graduation or enter specific college programs. This is not a course for a student who wishes to attend university immediately after graduation. High priority is given to the development of reading comprehension and to effective oral and written communication. Practical and personal writing is stressed. Students will also be exposed to a variety of literary forms.

ENGLISH LANGUAGE ARTS 121

Prerequisite: English Language Arts 111 or English Language Arts 112

As with English Language Arts 111, this course is designed for students whose aptitudes and interests in language and literature are above average. Though essentially the same outcomes are met in English Language Arts 122 and English Language Arts 121, English Language Arts 121 progresses at a faster pace and students are expected to work more independently and to take more responsibility for their studies. Students are also expected to cover a wider supplementary reading and writing program.

ENGLISH LANGUAGE ARTS 122

Prerequisite: Students must have passed English Language Arts 111 or 112

This is the regular college preparatory course for students who plan to attend university or college. Although there is emphasis placed on good writing skills, English Language Arts 122 has a greater focus on literature and on personal and critical responses to literature. Upon completion of this course, a student will be prepared for a university level course in English or a related discipline.

ENGLISH LANGUAGE ARTS 123

Prerequisite: English Language Arts 112 or 113.

As with English Language Arts 113, this course is for students who wish to enter the workforce after graduation or who wish to attend certain college courses. This is not a course for a student who wishes to attend university immediately after graduation. There is emphasis on sentence structure and paragraph writing skills. Students will study short stories, plays, novels, and poetry. Students will be exposed to Shakespeare and his works. There will also be a focus on media literacy.

AP ENGLISH LITERATURE 120

Prerequisite: English Language Arts 111 or 112 and 121 or 122

A.P. English Literature 120 engages students in the careful reading, discussion and critical analysis of some of the best world literature and, in so doing, deepens their understanding of the way's authors use language to provide both meaning and pleasure for their readers.

This course will be offered in the second semester and students who apply for it are required to attend a few after school seminars in semester one to prepare them for the course.

Upon completion of the course, students may, for a fee, write an external examination. Some universities will grant a college credit to those students who succeed on the external examination.

Students selecting this course should have above average reading and writing abilities and an interest in English.

CANADIAN LITERATURE 120

Prerequisite: English Language Arts 10

The goal of the Canadian Literature 120 curriculum is to promote an interest in Canadian texts through an examination of both short and long fiction, drama, non-fiction and poetry. The course is for students who have successfully completed Grade 10 English Language Arts, who demonstrate an interest in deconstructing texts, and who wish to explore Canadian identity through the study of literature. This course introduces students to the Canadian literary tradition—major authors, works, forms, periods, movements, and concerns—from colonial times to the present. Works are chosen from English-Canadian authors, French-Canadian works in translation, First Generation Canadians and Aboriginal Peoples.

JOURNALISM 120

Students will study print and electronic journalism. Four units of study will guide the inquiry in Journalism 120: 1) Accountability, 2) Propaganda, Sensationalism and the News, 3) The Craft, 4) The Medium is the Message. Students need to have a good understanding of ethics, democracy and freedom of speech. This is an English Language Arts elective and as such students MUST be comfortable writing non-fiction. In addition, students should have good reading skills and also be comfortable speaking and presenting in front of the class. This is a project-based class. Knowledge of Microsoft Publisher will also be an asset. Due to the high level of independent and group work, students must be able to meet the high level of independence, reliability and responsibility required of them.

GROWTH, GOALS & GRIT 110/120

This course provides students in grade 11 and 12 an opportunity to enhance skills required to pass the English Language Proficiency Assessment. Students will focus on skills to help students be prepared for the Reading portion or the written portion of the exam or for both parts, depending on the needs of the student. Additionally, support is provided through collaborative consultation with classroom teachers, helping students in this program become more effective learners and successful students. Reading strategies, test taking tips, organization and study skills are some elements taught in this course.

MEDIA STUDIES 120

Students will study all facets of the media including television, film, internet and social media. Four key concepts will be used as a foundation for students to understand the media in its many forms: 1) The media construct reality, 2) The media have their own forms, codes, and conventions, 3) The media present ideologies and values messages, 4) The media are businesses that have commercial interests. Students will be given opportunities to deconstruct the media and to create a variety of media projects. This is an English Language Arts elective and as such students should have good reading and writing skills and be comfortable speaking and presenting in front of the class. This is a project-based class. Students must know how to film and edit their own videos. Due to the high level of independent and group work, students must be able to meet the high level of independence, reliability and responsibility required of them.

READING TUTOR 120

Prerequisite: English 111 or 112

This course presents a unique opportunity for grade 12 students with high academic achievement and good communication skills to become reading tutors. Under the guidance of the resource teacher, tutors work on a one-to-one basis with Grade 10 students who are seeking to raise their reading level and to improve their writing skills. Tutors are first trained in basic reading theory and teaching techniques. They are then assigned one student to work with for the term. Tutors must commit to being present each day and to preparing daily tutoring activities for their Grade ten student... This is a chance to make a positive contribution to our school, to acquire leadership skills, and to experience a real-life teaching situation. This course is especially recommended for those planning careers in education, guidance, or social services.

WRITING 110

Prerequisite: English 10

This course is intended for students who have taken English Language Arts 10. The course is for Grade 11 and 12 students who can work independently. **NOTE: This is not a remedial writing course.** It is intended for students who **enjoy** writing and wish to improve their skills. The mechanics of constructing clear, correct, and effective sentences, paragraphs and essays will be emphasized. Students will be encouraged and have an opportunity to develop their own technical and creative writing daily and have regular feedback from their teacher and peers on their work.

FINE ART COURSES

Fine Art courses are designed to provide students with opportunities to develop:

- their visual awareness and literacy in an increasing visual world
- their skills in art processes and techniques,
- their understanding of several art movements and theories,
- their potential to respond critically to visual and aesthetic phenomena,
- an understanding of their art heritage, and
- Work place skills in the art and design fields.

GRAPHIC ART & DESIGN 110

VA 10 (90) will be an asset

Students examine the changing face of graphic and computer art as well as the history of print media. Explorations include the study of typography and calligraphy and the application of text to all forms of media. Students apply the elements/principles of design to group and individual art projects such as signage, billboards and production

of school play posters. Black & white darkroom techniques are introduced. This course fulfills the computer credit. A lab fee of \$20 applies.

MUSIC 11

Music 10 (90) will be an asset

Music 11 follows a similar format as Music 10(90h). Emphasis will be placed on both the practical aspect of music – performing in solos and ensembles and theory, ear training, and music history/appreciation. Students will prepare to present a “solo” on an instrument or voice. The aim of this course is the continuing development of well-rounded, knowledgeable, competent musicians at the high school level. Attainment of Level 1 or 2 credit will be decided by the number of outcomes achieved at the end of the course.

MUSIC 120 (World Music)

This is a Fine Arts/Life Role credit

This course is an elective for students with a special interest in music and its role in global culture. Musical proficiency is not required for this course; modules allow for either research or performance-based options and can be selected considering students’ individual strengths. Modules explored will include the music of North America, the Caribbean, Africa and East Asia. Students will demonstrate an understanding of the importance of music to a wide variety of peoples and cultures, the value of music as a form of cultural expression and its relationship to other art forms and influences, and musical growth through engaging in musical activities in a variety of styles from around the world.

MUSIC 122

Prerequisite: Music 11

Music 122 is designed for the advanced and/or serious student of music. It follows a similar format as Music 11. Included are the following topics: technical/performance skills, theory and composition, Canadian music history, Canadian music industry careers and music criticism. The course assumes an interest in improving upon and expanding areas of musical knowledge and expertise.

THEATRE ARTS 120

Prerequisite: English Language Arts 10

It is expected that students applying for this course have an interest in theatre. Students are expected to be able to work independently and to be involved in related projects that require work after school and in the evening. Theatre Arts 120 covers a study of the history of theatre, set design, lighting, costuming, improvisation, and acting. Time is divided between the classroom and the stage. The course culminates with the staging of a production.

VISUAL ARTS 110

VA 10 (90) will be an asset

This course offers students a deeper understanding of the elements and principles of drawing, painting, and sculpture. Emphasis is on studio work. Group discussions and written work with an art historical focus are regular features. Students will need to purchase an acrylic painting kit, the cost of which will be kept to \$35.00.

VISUAL ARTS 120 – OFFERED IN FALL SEMESTER TO DEVELOP WORK FOR PORTFOLIO

Prerequisite: Visual Arts 110 or Graphic Art and Design 110

This course is for students with a serious interest in art and is interested in finishing the development of skills necessary to develop portfolio quality work. This course is divided into four units. Within this structure, students choose activities from both assigned and independent projects. Group discussions and written work focusing on contemporary art are a required part of this course. Students learn curation skills by participating in a senior show

at the end of the semester. As well as being a course of general interest, Visual Art 120 offers those seriously interested in continuing their education in Art the opportunity to prepare works that may be included in a portfolio. Students will need to purchase an art kit, the cost of which will be kept to \$30.00.

HEALTH & PHYSICAL EDUCATION COURSES

DANCE 110 (Local Option)

This is a performance class. Dance is an art that is meant to be shared! Activities will often be in groups; thus, excellent attendance is absolutely critical. Creation and composition of dance will focus on the styles studied in class. Through extensive work in dance movement, individually and in small and large groups, students will have opportunities to explore basic expressive movement skills and to combine these in a wide range of dance styles. The emphasis is on the process of creating dance, through improvisation, and bringing dance to various forms of set choreography.

OUTDOOR PURSUITS/EDUCATION 110

(Grade 11 & 12 Students selected through an Application Process)

Outdoor Education 110 provides students opportunities to explore, various outdoor activities such as camping, backpacking, hiking, canoeing, cross-country skiing, snowshoeing, orienteering, etc., in a safe and respective manner. Students will step outside of their comfort zones to learn first-hand the values of intelligent risk-taking, perseverance and resilience. Contributing to the development of their well-being, this outdoor education course also teaches students about themselves as it forges strong interpersonal relationships. In addition, students will gain greater insight, appreciation, concern and knowledge about the outdoor environment and the opportunities that it holds for educational, recreational and economic benefit.

Students will be expected to satisfy specific requirements to complete a series of out-trips that may be day-trips, overnight excursions or extended trips. Students must be prepared to plan, lead and evaluate out-trip experiences from personal and group dynamics perspectives. Also, throughout the course students will take part in many team-building activities and group problem solving initiatives, where students learn to communicate and support one another to reach their goals, improve self-esteem, develop leadership skills, develop strategies that enhance decision-making, and to respect the differences within a group.

PHYSICAL EDUCATION LEADERSHIP 120

(Grade 11 & 12 Students selected through an Application Process)

This course is an elective one for students with a desire to develop leadership skills which will enable them to translate their interests into dynamic personal involvement in the community. Students are required to apply for admission to the course. This course consists of units in management of athletic events, teaching, coaching, officiating, and sports in contemporary society, selected health topics, communication and interpersonal development.

As a member of the PE 120 Leadership Class, each student must achieve a minimum number of leadership hours. These hours place the students in a responsible role throughout the community, helping them better understand the need for leaders and their individual potential as leaders. Each student must organize a major event.

WELLNESS THROUGH PHYSICAL EDUCATION 110

The goal of the *Wellness through Physical Education 110* curriculum is to promote healthy active living for life. Students will experience a variety of wellness activities, design a wellness opportunity for a community group and

are expected to create and implement a personal healthy active living plan. The course is intended to allow a broad-based exploration of various dimensions of wellness and encourage a healthy, balanced lifestyle.

YOGA 110 (Local Option)

This course introduces students to the ancient tradition of yoga in its various forms & styles. With its vast capacity to bring vibrant health to body, mind & emotions, the intention is for students to develop a lifelong personal practice of yoga, not only to maintain exceptional physical condition, but also to develop healthy relationships with self, others and the earth.

LIFE STUDIES

The Family Studies concentration of courses provides training for students:

- who seek a basis for future studies in fields of foods and nutrition, fashion design, hospitality and tourism and child care, or
- For those who wish to seek employment in the hospitality industry, day care, and clothing services.

CHILD STUDIES 120

This course involves a study of reproduction, conception, pregnancy, childbirth, infancy and children up to the age of five. Participation in a preschool experience allows students excellent insight into the responsibilities and challenges of parents and teachers. This course is beneficial to those students whose future career plans involve working with children in any field.

EARLY CHILDHOOD SERVICES 110

This course introduces a variety of concepts including; nutrition, play, safety, storytelling and how these affect developments. Areas of study include child-related careers and lesson planning, organizing and setting up a playschool, as well as hands-on teaching experience in a student run playschool. As a member of this class, each student must achieve a minimum number of hours of leadership in large group and small group activities with preschooler observation.

INDIVIDUAL & FAMILY DYNAMICS 120/ FI INDIVIDUAL & FAMILY DYNAMICS 120

This course is an elective for students who may wish to pursue fields of study such as: social services, family law, careers in counseling, psychotherapy, law enforcement, and the field of medicine. Since the family has been described as the cornerstone of society and there are a multitude of factors which impact on family life, this course focuses on understanding yourself, building self-confidence, relationships with parents and peers, dating, coping with stresses inside the family, (violence, divorce, and remarriage) and coping with stresses outside the family, (drugs, alcohol, sex, date rape, and sexually transmitted diseases). This course touches on aspects of sociology, psychology, economics and anthropology.

NUTRITION FOR HEALTHY LIVING 120

Through research, the science of nutrition continues to expand. It is important to understand information provided and to make smart, healthy decisions. Nutrition for Healthy Living 120 is designed to make students aware of preventative strategies to contribute to overall wellness, make healthy food choices and maintain a balance between eating habits and physical activity. Special emphasis is given to the study of nutrients; how they work in the human body, identifying the best food sources of each nutrient, and recognizing the effects of using too little or too much of a nutrient. Current issues relating to chronic diseases, lifestyles and food technologies will also be discussed. Students will be encouraged to use reliable information to examine their eating habits and

lifestyle choices. This is an excellent course for those concerned with personal wellness or for students who wish to pursue a career in science and nutrition or health-related fields.

MATHEMATICS COURSES

In order to graduate, students must obtain a passing grade in one grade 11 Math course. However, many post-secondary institutions offer programs that require additional mathematics courses. Students should consult with their math teachers and guidance counsellors as to which Grades 11 and 12 Mathematics courses they should take. Please take note of the prerequisites for individual courses in the course descriptions.

FINANCIAL AND WORKPLACE MATH 110

Prerequisite: *GMF 10*

This is a one semester course designed for students who are interested in entering trades or directly entering the work force. This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into most trades and for direct entry into the work force. Topics include geometry, financial mathematics, number, algebra, measurement, statistics and probability.

FINANCIAL AND WORKPLACE MATH 120

Prerequisite: *Financial & Workplace Math 110*

This is a continuation of the pathway that is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into some college programs and for direct entry into the work force. The aim of this course is to develop spatial sense through direct and indirect measurement, number sense and critical thinking skills, algebraic and statistical reasoning and critical thinking skills related to uncertainty. A final project in the course will focus on an appreciation of the role of mathematics in society.

FOUNDATIONS OF MATH 110/ FI FOUNDATIONS OF MATH 110

Prerequisite: *GMF 10 and NRF 10/ FI GMF 10 and FI NRF 10*

Co-requisite: *Pre-calculus 110/ FI Pre-Calculus 110*

This is a one semester course designed for students who are interested in attending university or certain programs in community college. Topics include proportional reasoning, logical reasoning, geometry, relations and functions, financial mathematics, statistics, and probability.

FOUNDATIONS OF MATH 120

Prerequisite: *Foundations of Math 110*

This is the second of two courses in the Foundations of Mathematics pathway ***designed for entry into post-secondary academic programs not requiring pre-calculus***. In statistics, students are introduced to normal curves, and learn to interpret statistical data, using confidence intervals, confidence levels, and margins of error. To develop logical reasoning students analyze puzzles and games, and solve problems that involve application of set theory and conditional statements. The validity of odds and probability statements are assessed and problems are solved that involve probability of two events, the fundamental counting principle, permutations, and combinations. The binomial theorem is used to expand powers of a binomial. Data is represented using polynomial functions, exponential and logarithmic functions and sinusoidal functions to solve problems. This course completes the Foundations of Mathematics pathway.

PRE-CALCULUS 110/FI PRE-CALCULUS 110

Prerequisite: *GMF 10 and NRF 10/ FI GMF 10 and FI NRF 10*

Co-requisite: *Foundations 110/ FI Foundations 110*

This is a one semester course designed for students who are interested in attending university or community college and taking post secondary programs that require mathematics. Specifically, this pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus. Topics include algebra and numbers, trigonometry, relations and functions, and more.

PRE-CALCULUS A 120

Prerequisite: Foundations of Math 110 and Pre-Calculus 110

Co-requisite: Pre-Calculus B 120

Students demonstrate and apply an understanding of the effects of horizontal and vertical translations, horizontal and vertical stretches, and reflections on graphs of functions and their related equations. They are introduced to inverses of functions, logarithms, and the product, quotient and power laws of logarithms and use these laws and the relationship between logarithmic and exponential functions to solve problems. Students are introduced to angles in standard position, expressed in degrees and radians, and to the unit circle. The six trigonometric ratios and the sine, cosine and tangent functions are used to solve problems. First and second-degree trigonometric equations are solved algebraically and graphically with the domain expressed in degrees and radians. Trigonometric identities are proven using reciprocal, quotient, Pythagorean, sum or difference, and double-angle identities.

PRE-CALCULUS B 120

Prerequisite: Foundations of Math 110 and Pre-Calculus 110

Co-requisite: Pre-Calculus A 120

Students analyze arithmetic and geometric sequences and series to solve problems. They learn to factor polynomials of degree greater than 2, and to graph and analyze polynomial functions. They also graph and analyze radical, reciprocal and rational functions, building a function toolkit. Students are introduced to the concept of limits and determine the limit of a function at a point both graphically and analytically.

Students learn fundamental counting principles including permutations and combinations. Other topics include the binomial theorem, arithmetic and geometric sequences and series, how to factor polynomials of degree greater than 2, and to graph and analyze polynomial functions. They also graph and analyze radical, reciprocal and rational functions, building a function toolkit. Students are introduced to the concept of limits and determine the limit of a function at a point both graphically and analytically. They explore and analyze left- and right-hand limits as x approaches a certain value using correct notation, analyze the continuity of a function and explore limits which involve infinity. They learn operations on functions, including composite functions.

CALCULUS 120

Prerequisite: Pre-Calculus A 120 and Pre-Calculus B 120

This is a one semester course that includes such topics as: precalculus review, limits, definition of derivative, differentiation rules for sums/differences, products and quotients, chain rule, implicit differentiation, derivatives of trig functions, inverse trig functions, logarithmic and exponential functions. Applications of derivatives are examined including Mean Value Theorem, related rates, optimization problems, graphing, intervals of increase/decrease, concavity, critical points, inflection points, antiderivatives, rectangular approximation method, indefinite integrals.

Note: Students interested in taking Advanced Placement (AP) Calculus 120 in Semester 2 should take Calculus 120 in Semester 1.

AP CALCULUS AB 120***Prerequisite: Calculus 120***

This is a one semester course, offered in Semester 2, that includes such topics as: applications of derivatives (maximum/minimum problems, related rates, Newton's Method, linearizations, rectangular approximation method, Riemann Sums, definite integrals and area, indefinite integrals, antiderivatives, Fundamental Theorem of Calculus, Trapezoidal Rule), L'Hopital's Rule, slope fields, differential equations, logistic growth models, integration techniques (such as by parts, substitution, partial fractions, trig substitution, numerical methods including Euler's Method and improved Euler's Method, applications of integrals including force, population density, areas in the plane, volumes of solids.

AP STATISTICS 120***Prerequisite: Pre-Calculus 110***

This is a one semester course, offered in Semester 2, which includes such topics as: experimental design, descriptive statistics, probability, discrete and continuous probability distributions, estimation, hypothesis testing, regression analysis, chi square tests of hypotheses, t tests, z tests on proportions, means and variances, and more.

SCIENCE COURSES

In order to graduate, a student must have a minimum of Science 9, Science 10 and one 11 or 12 science credit. Level 2 courses are designed for university and college-bound students. Level 1 courses are designed for students of superior ability and proven skills that have a special interest in Sciences. Level 3 courses are designed for students who will probably not go on to university.

BIOLOGY 111***Prerequisite: Science 10, GMF 10 AND NRF 10***

Biology 111 is intended for students with above average interest and ability. It is a more intensive course than Biology 112 and concepts are investigated in greater depth. The course aim is to acquaint students with the nature of life's processes. Laboratory work of greater depth is an essential element of this course.

BIOLOGY 112 / FI BIOLOGY 112***Prerequisite: Science 10 AND GMF 10******FI Prerequisites: FI Science 10 AND FI GMF 10***

This course is an introductory course in the field of biology. The course places emphasis on the basic biological principles needed for further study in biology. Concepts discussed include cellular structure and function, biodiversity and maintaining dynamic equilibrium part 1. Laboratory work supplements regular classroom instruction, with concentration in the areas of microscopy and dissections.

BIOLOGY 122***Prerequisite: Biology 112******Co-requisite Foundations of Math 110***

Biology 122 is designed for grade 12 students. Students in grade 11 should enrol in this course only after careful consideration as it is recommended that students taking this course have a strong science background. A previous introductory biology course (Biology 112) should have been completed successfully. Additional science courses, especially Chemistry 112, are good background for Biology 122. Students who have not completed other science courses successfully find Biology 122 difficult. A student who plans to enter university programs that are life science oriented (nursing, pre-med, pharmacy, etc.) should complete both Biology 112 and Biology 122.

Concepts to be discussed include genetic continuity, evolution, change and diversity and maintaining dynamic equilibrium part 2. Laboratory investigations are an important part of the Biology 122 course.

BIOLOGY 121

Prerequisite: Biology 111 or 112

Co-requisite: Foundations of Math 110

The course content is like Biology 122, but topics are discussed at the molecular level and in greater detail. The higher expectations in this course are meant to heighten the challenge to the student.

CHEMISTRY 111

Prerequisite: Science 10, GMF 10 AND NRF 10

Co-requisite Foundations of Math 110

This course should be selected only by students who have a **very good** background in **mathematics and science** and who have a strong interest in the sciences. The course content is like Chemistry 112; however, the topics will be covered in more depth and more laboratory work will be included in the program. Additional assignments will be given and the students will be expected to handle a greater workload.

CHEMISTRY 112

Prerequisite: Science 10, GMF 10 AND NRF 10

Co-requisite: Foundations of Math 110

This course is a college or university preparatory program used as an entrance requirement for science related university courses, some technical school courses, and nursing. It is the first year of a two-year high school program. Chemistry 112 is a prerequisite for Chemistry 122. The concepts to be learned include matter and energy in chemical change, matter as solutions and gases, quantitative relationships in chemical change, and chemical bonding in matter. The accompanying laboratory program is aimed at familiarization with simple laboratory apparatus and techniques, as well as safely working in a laboratory situation.

CHEMISTRY 121

Prerequisites: Chemistry 111 or 112 AND Foundations of Math 110

The concepts to be learned in Chemistry 122 will be considered in greater depth. Students selecting this course should be prepared for a greater workload than the students taking Chemistry 122. Additional laboratory work and additional assignments will form an integral part of this program.

CHEMISTRY 122

Prerequisites: Chemistry 111 or 112 AND Foundations of Math 110

The second-year course includes these concepts to be learned: The diversity of matter, Organic Chemistry, Thermo chemical change, equilibrium, acids and bases in chemical change and electrochemical changes. The laboratory program continues with the same objectives as in Chemistry 112 and expands upon the safe use of various chemicals and equipment. Students should determine if the program they plan to follow high school has a chemistry requirement. A minimum mark of 70% in Chemistry 112 is suggested as preparation for Chemistry 122.

HUMAN PHYSIOLOGY 110

Prerequisite: Science 10

Human Physiology 110 is designed to appeal to a wide range of learners including students for whom this will serve to fulfill their science graduation requirement and students who will take additional science courses. A study of Human Physiology will be relevant to every student, providing them with the tools they will need to make informed choices about their own health and that of others. It will also be relevant to those students who will be

going on to careers in the social sciences, health care and medicine. This course focuses on the biology and healthy functioning of all the major human body systems and how wellness can be compromised by struggles with mental and social health, lifestyle choices and disease.

INTRODUCTION TO ENVIRONMENTAL SCIENCE 120

Prerequisite: Science 10, GMF 10 AND NRF 10

This is a one-year college or university preparatory course. It can be taken during grade 11 or grade 12. The concepts discussed focus on attitudes towards the environment, the ecosystem concept, resource use and trash production, population, food production, and current environmental issues. There is a large focus on in-class group activities to reinforce concepts. Although there is no prerequisite, students who have taken, or are presently taking either a Biology or a Chemistry course will find it helpful.

PHYSICS 111

Prerequisite: Science 10, GMF 10 AND NRF 10

Co-requisite: Foundations of Math 110

This course should be selected only by students who have a **very good** background in **mathematics and science** and who have a strong interest in the sciences. The course content will be like Physics 112 except that the concepts to be learned will be considered in more depth. Students selecting this course should be prepared for a greater workload than the students taking Physics 112. Additional assignments will be required. The concepts to be learned include Kinematics, Dynamics, Work and Energy, Waves

PHYSICS 112/ FI PHYSICS 112

Prerequisite: Science 10, GMF 10 AND NRF 10/ FI Prerequisite: FI Sci 10, FI GMF 10 AND FI NRF 10

Co-requisite: Foundations of Math 110/ FI Co-req: FI Foundations of Math 110

Any student who has not successfully completed Mathematics 10 should not attempt this course. The two-year physics program is a prerequisite for most science and technology programs beyond high school. Laboratory work is an integral part of this course. The concepts to be learned include Kinematics, Dynamics, Work and Energy, Waves.

PHYSICS 121

Prerequisite: Physics 111 or 112 AND Foundations of Math 110

The concepts to be learned are the same as Physics 122, except that the concepts will be covered in greater depth. Students selecting this course should be prepared for a greater workload than the students taking Physics 122. Additional laboratory work and additional assignments are part of the program.

PHYSICS 122

Prerequisites: Physics 111 or 112 AND Foundations of Math 110

The concepts to be learned include the study of dynamics, projectiles, circular motion, universal gravitation and fields. A laboratory program is an integral part of this course.

AP BIOLOGY 120

Prerequisites: Biology 121

Students should be aware that enrolment in this course requires the successful completion of previous biology courses, 111 and 121. This course is a one term course. The topic list includes all those covered in Biology 111 and Biology 121 as well as evolution, populations' genetics, DNA technology, and ecology. Students will be exposed to the level and workload of a first-year university Biology course. The course includes a three-hour lab session about three weeks. Students may choose to write the AP exam in Biology upon completion of the course.

AP CHEMISTRY 120***Prerequisites: Chemistry 121***

Students will be exposed to the level and workload of a first-year university chemistry course. The topics covered include atoms, molecules and ions, stoichiometry, chemical reactions, gases, thermo chemistry, atomic structure, and periodicity, bonding, orbitals, liquids and solids, solutions, chemical kinetics, chemical equilibrium, acids and bases, spontaneity, entropy and free energy, electrochemistry, and nuclear chemistry. A three-hour lab per week is a common occurrence. Students may choose to write the AP exam in Chemistry upon completion of the course.

AP PHYSICS 1 120***Prerequisites: Physics 121***

Students will be exposed to the level and workload of a first-year university Physics course. AP Physics 1 is usually equivalent to the first half of first year university Physics. Topics are similar to Physics 111 and Physics 121 and are covered in more depth. Weekly labs may be a common occurrence. Students may choose to write the AP exam in Physics upon completion of the course.

AP PSYCHOLOGY 120***Prerequisite: Grade 12 students with an average of 80% and Grade 11 students with an average of 90%***

The purpose of the course is to introduce students to the systematic and scientific study of the behaviour and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about methods psychologists use in their science and practice. Many universities accept AP Psychology for 3 credit hours or for advanced standing.

Because a great deal of content is covered, because the content is often difficult to master, because of requirements set by the College Board, and because it is an elective course, only students with a strong interest in psychology and who have a strong academic record will be accepted for this course.

SECOND LANGUAGE COURSES

A French Achievement Certificate will be awarded to all grade 12 students of French who have successfully fulfilled the following requirements:

- French Immersion (FI) Early and Late - completion of full 9-10 program and completion of five (5) courses in French during the graduation years.

Students in the Immersion (Early and Late) programs are expected to continue their program at the senior high level by taking 5 courses in French in the graduation years (during grades 11 and 12).

POST INTENSIVE FRENCH (PIF) 110***Prerequisite: PIF 10***

Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second Language. Themes at this level include mysteries, injustices and the power of photography.

**Note also that if a student achieves a level of Intermediate at the end of grade 10, he or she may select to enrol in French immersion courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.*

POST INTENSIVE FRENCH (PIF) 120**Prerequisite: PIF 110**

Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second Language. Themes at this level include: looking to the future, ecological challenges, similarities and differences and careers. **Note also that if a student achieves a level of Intermediate at the end of grade 10, he or she may select to enrol in French immersion courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.*

FI (EARLY) LANGUAGE ARTS 110**Prerequisite: Early FI Language Arts 10**

This course is a continuation of the grade 10 course and follows the same general pattern. The content of this course is based on five components: oral expression, literature, grammar, composition, and culture. This course is to be taken in conjunction with F.I. History 112, F.I. Finance and Workplace Math 11 or FI Foundations in Math 11, and F.I. Biology 112.

FI (LATE) LANGUAGE ARTS 110**Prerequisite: Late FI Language Arts 10**

This course is a continuation of the grade 10 late immersion program. The course consists of seven components: vocabulary, oral expression, literature, grammar, composition, role playing and culture. This course is to be taken in conjunction with F.I. History 112, F.I. Geometry and Applications 112 and F.I. Biology 112.

FRENCH 121/FRENCH 122**Prerequisite: PIF 11**

This is the final year of the regular academic program. In this course, there is a strong emphasis on oral and aural work.

FI (EARLY) LANGUAGE ARTS 120**Prerequisite: Early FI Language Arts 110**

This course follows the same general pattern as the grade 11 course and continues to emphasize vocabulary and oral expression, literature, grammar, written expression and composition, and culture.

FI (LATE) LANGUAGE ARTS 120**Prerequisite: Late FI Language Arts 110**

This is the final course in the immersion program. It follows the same structure as the grade 11 Language Arts course, continuing to emphasize the four language skills.

FI BIOLOGY 112**FI Prerequisite: FI Science 10, FI GMF 10 AND FI NRF 10**

This course is an introductory course in the field of biology. The course places emphasis on the basic biological principles needed for further study in biology. Concepts discussed include cellular structure and function, biodiversity and maintaining dynamic equilibrium part 1. Laboratory work supplements regular classroom instruction, with concentration in the areas of microscopy and dissections of earthworms, grasshoppers, frogs, and fetal pigs.

FI CANADIAN GEOGRAPHY 12**Prerequisite: FI Social Studies 10**

This course has been designed to encourage students to become actively involved in learning more about their country. It examines Canada's position in the world and attempts to provide the student with some understanding

of our present circumstances. The geology of Canada's regions and how it relates to resource development will be examined. It attempts to identify the issues and decisions, which lie ahead for Canadians, and attempts to establish a personal framework for dealing with these issues. A wide variety of audio-visual materials are used to broaden the scope of the work.

FI CANADIAN HISTORY 12

Prerequisite: FI Modern History 11

This course involves the history of Canada from "Confederation" to modern day Canada. The course is covered by a topical approach, such as Confederation, the building of railways, the natives, gold, Canada at war, FLQ, and Foreign Policy, etc. Topics will be covered through lectures, readings, films, and guest speakers.

FI PHYSICS 112

FI Prerequisite: FI Science 10, FI GMF 10 AND FI NRF 10

Co-requisite: FI Foundations of Math 110

Any student who has not successfully completed Mathematics 10 should not attempt this course. The two-year physics program is a prerequisite for most science and technology programs beyond high school. Laboratory work is an integral part of this course. The concepts to be learned include Kinematics, Dynamics, Work and Energy, Waves

FI INDIVIDUAL & FAMILY DYNAMICS 120

This course is an elective for students with a special interest in sociology, psychology, teaching, social work, police work and the field of medicine. Since the family has been described as the cornerstone of society and there are a multitude of factors which impact on family life, this course focuses on understanding yourself, building self-confidence, relationships with parents and peers, dating, coping with stresses inside the family, (violence, divorce, and remarriage) and coping with stresses outside the family, (drugs, alcohol, sex, date rape, and sexually transmitted diseases).

Grade 12 is an ideal time for students to reflect upon their own family experiences, consider alternate futures, and gain an understanding of daily family problems and the potential impact of their decisions in choosing a marriage partner and/or an independent life style.

FI MEDIA STUDIES

Media Studies explores the unique characteristics, workings and impact of film, television, radio, and the printed media. Emphasis is placed on reading and discussing articles, critiques, and reviews of the various media under study. Students considering this course should have, therefore, good reading and writing skills and should be able to engage in-group discussions. Students may be expected to work beyond class time to fulfil the requirements of the course. Students enrolled in Media Studies 120 must be mature enough to meet the high level of independence, reliability, and responsibility required of them.

AP FRENCH 120

The AP French Language and Culture course takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. Students should learn language structure in context and use them to convey meaning. The AP French Language and Culture course strives to promote both fluency and accuracy in language use and not to overemphasize grammatical accuracy at the expense of communication. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of products, both tangible (e.g.,

tools, books, music) and intangible (e.g., laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions that underlie both practices and products.)

SPANISH 110

Co-requisite: FILA 10 or PIF 10

This is an introductory course in one of the world's most widely spoken languages. The course is then designed for students with no background in Spanish. Speaking and listening skills are developed with an orientation toward real-life tasks and genuine communication. Some very basic grammar is studied, but class presentations, films and dialogues contribute to make this a very active learning experience. This course is an excellent preparation for a university Spanish course.

SPANISH 120

Prerequisite: Spanish 110

This second Spanish course will continue where Spanish 110 left off. As in the previous course, speaking and listening skills are developed with an orientation toward real-life tasks and genuine communication. New topics will be covered giving the student a broader knowledge of the language. More advance grammar is studied, but the emphasis continues to be oral communication. Group and individual presentations, films and dialogues contribute to make this a very active learning experience. Students should easily be able to exempt the introductory Spanish course at university following the successful completion of this course.

SOCIAL STUDIES COURSES

In grade 11 and 12, level 2 courses are designed for university-bound students. Level 1 courses are designed for students of superior ability and proven skills that have a special interest in the Social Studies. Level 3 courses are designed for students who will probably not go on to university. 120 classes are open to all students provided they have the pre-requisites completed.

MODERN HISTORY 112 & FI MODERN HISTORY 112

Prerequisite: Social Studies 10 or FI Social Studies 10

This is a Modern History course which covers the main political, economic, social and intellectual developments since 1789. Major topics covered include: the French Revolution, the unification of Germany and Italy, World War I (causes, events and results), Totalitarianism (its development and consequences), World War II (causes, events, and results), the Holocaust, the Cold War and post war developments in the third world.

MODERN HISTORY 113

Prerequisite: Social Studies 10 or FI Social Studies 10

This is a Modern History course which covers the main political, economic and social developments following the French Revolution. Major topics covered include: Revolutions, Nationalism and Negotiations, World War I, Totalitarianism and Total War, World War II, the Holocaust and other crimes against Humanity.

CANADIAN HISTORY 122/ FI CANADIAN HISTORY 122

Prerequisite: Modern History 112 or FI Modern History 112

This course involves the history of Canada from "Confederation" to modern day Canada. The course is covered by a topical approach, such as Confederation, the building of railways, the natives, gold, Canada at war, FLQ, and Foreign Policy, etc. Topics will be covered through lectures, readings, films, and guest speakers.

ECONOMICS 120

The general aim of the Economics 120 program for New Brunswick is to provide students with a basic understanding of our economic system and how it works., It will explore the various factors that affect our economic decision making whether they be individual or group decisions. It should enable students to acquire relevant information on key economic topics and issues as well as make objective judgements through critical thinking and rational decision making.

LAW 120

Law 120 specifically deals with issues such as freedom, equality, human dignity, justice, Rule of law, and civic rights and responsibilities. It also explores the legal aspects of how Citizens in a democratic nation manage their relationships with each other and with the State. The knowledge, skills and attitudes developed in Law 120 directly contribute to the growth of students as knowledgeable, responsible citizens who understand the need for law and participate in the democratic process with consideration for the rights of others.

This course introduces legal principles and concepts, both criminal and civil. The major topics covered are courts, civil rights, contracts, torts, consumer protection, criminal law, charter issues and family law. A concentrated effort is made to use as many current cases as possible to show how the law is being applied to issues relevant today. Students may be required to pay approximately five dollars for the cost of a field trip.

NATIVE STUDIES 120

Native Studies 120 is a course primarily designed to promote understanding of Mi'kmaq and Wolastoqiyik perspectives on life in the Maritime Provinces. Past, present and future implications are explored through an often intersectional and interdisciplinary approach that looks at elements such as land, language, sport, story, sovereignty, and various artistic forms. Awareness is also enhanced by evaluating Indigenous contexts within the National and Global spheres. Aboriginal pedagogical (teaching and learning) styles are also acknowledged and incorporated to develop both analytical and intuitive capacities in students.

PHILOSOPHY 120 (Local Option-pending approval)

The motivation to establish a 120 Philosophy course at KVHS has been inspired by what we know about the ancient Greek thinkers and the scientists and philosophers of the Age of Enlightenment. There appeared to be an understanding that although the disciplines of math, science and the humanities had developed their own characteristics and methods over time, they were never separate from one another. We contend that this course is unique in that students will gain a greater appreciation of the notion that what they are learning in the math and science wings of the school inform and inspire what is being learned in art, music, and the social studies: that their learning is connected. We aspire to engage students in such a way as to call upon several areas of study in order to achieve our identified outcomes at the highest possible level.

In New Brunswick, we are exploring and integrating a few transformative practices. Since the 120 Philosophy course is open to all students with a variety of interests and competencies, and because the course is designed around themes and concepts, as opposed to events and more specific content, the 120 Philosophy course provides the opportunity to apply many more of these 'best practices' in a profound way.

POLITICAL SCIENCE 120

The aims of Political Science 120 are to provide a basic understanding of how the various governments in Canada function and to compare our governmental system with those that exist in various other nations; make students aware of events and decisions that will influence their lives and come to an understanding of why and how these events and decisions came to be; and give students an understanding of the historical roots of political ideologies like democracy, communism, and fascism, and how they are reflected in present day governments and groups.

Students will participate in several debates covering political topics. As well, students will coordinate a mock election to be held within the school.

SOCIOLOGY 120

Sociology 120 will increase students' awareness of themselves and others as social beings and the social processes that shape the world in which they live. Students will develop a better understanding of the ways in which attitudes and values develop and enter individual and group action. Students will also develop an awareness of the problems confronting contemporary society. The basic methods of social scientific investigation and the methods of which data are presented will be examined. Sociology 120 is an elective course for Grade 12 students only.

WORLD ISSUES 120

Prerequisite: Modern History 112/3 or FI Modern History 112

This course is designed for students who are planning to attend university or community college. It focuses on a study of how the world's communities depend on each other and affect each other. There are two sections: geo-political issues of peace and security such as civil war, Cold War, nuclear warfare, terrorism, United Nations; and the social-economic issues challenging the world today, such as food and hunger, population growth and movement, international trade, advances in technology, and international aid and development.

AP EUROPEAN HISTORY 120

Prerequisite: Modern History 112 or FI Modern History 112

This is a European history course that encompasses 1450 to present day. It is a university level course that requires an independent, mature learning approach. Topics covered include the Renaissance, the Reformation, the Scientific Revolution, the Age of Enlightenment, the French Revolution, Marxism, Liberalism, Socialism, Imperialism, etc.

Students intending to pursue university studies in History, Political Science, Geography, Economics, Sociology, Journalism, Women's Studies or any other Liberal Arts Education should consider taking this course.

AP HUMAN GEOGRAPHY 120

AP Human Geography studies the interaction between people and the land where we live. The class will cover concepts such as migration, population, language, religion, ethnic diversity, cities, boundary disputes and our impact on the environment.

As there is no prerequisite, this is the perfect Advanced Placement class for grade 11 students. As most who take this class in the U.S. are in grade 10, it is an exam on which our students tend to be very successful. For that reason strong students in grade 10 could even select this as their elective class. It is a great way to start accumulating undergraduate degree credit as a successful exam is accepted by many universities as the equivalent of a one (sometimes two) semester undergraduate course.

GENDER, MEDIA, AND CULTURE 120 (Local Option)

Gender Studies 120 aims to introduce students to critical literacy practices by examining cultural constructions (media representations) that shape and inform identities. The course engages students in reflective thinking about how they have been taught to "read the word and read the world" (Freire, 1970). Students participate in class discussions and activities that focus on representations of race, gender, class, sexuality, ability, language and other identity categories found in past and present media sources. The overall goal of the course is to encourage critical thinking, critical questioning, and critical action to construct a more socially just and democratic world.

Units of Study: Introduction to Critical Discourse; Personal Relationships; Stereotypes; Gender Issues; Role of Media in Socialization Process.

INFORMATION, COMMUNICATION, TECHNOLOGY & DESIGN AND TRADES COURSES

Technical Course instructional time is divided between classroom theory and practical hands-on labs. These courses have been found to be an asset not only for students entering Community College Trade courses but also for students entering Community College Technical courses and University Engineering or Forestry programs as well as the student entering directly into the work force.

A student may choose one of the following as a science credit:

- Automotive Electrical Systems 120
- Introduction to Electronics 110
- Micro Electronics 120

In cooperation with the Apprenticeship Branch of the Department of Labour

Any student that receives a mark of 70% or greater in any Technical/Vocational course is eligible to receive 80 hours of credit towards a related trade when registering with the New Brunswick Apprentice and Occupation Certification Branch. This means that if a student made 70% or greater on five Technical/Vocational courses they would be granted 400 (5 x 80) hours towards a related trade.

ADVANCED TECHNOLOGY 120

Advanced Tech 120 (Green Energy tech) looks at various alternative technologies for the production and capture of energy. We look at these technologies from a practical, hands on perspective. In this course we will build and test various alternative energy devices; such as solar panels to capture the sun's heat, and windmills to turn wind energy into electricity.

AUTOMOTIVE ELECTRICAL SYSTEMS 120

Prerequisite: Internal Combustion Engines 110

This course introduces the student to the theory and operation of basic electrical systems. It covers electron theory, electric circuits, circuit protection, switching devices and magnetism. These are related to the operation and service of batteries, starting motors, alternators and ignition systems.

NOTE: This course may be selected as a Science credit

BUSINESS ORGANIZATION AND MANAGEMENT 120

Students will develop the critical thinking and problem-solving skills needed to excel in post secondary learning and understand/practice the leadership and management skills required to enhance New Brunswick small business enterprise.

This course is designed to have a high degree of student engagement and student lead exploration. The concepts presented in this curriculum will prepare students to apply their knowledge and skills in New Brunswick, as well as in national and global real-world unpredictable business situations.

COMPUTER AIDED DESIGN 110 (CAD 110)

This introductory drafting course introduces students to the visualization and presentation of ideas in the form of technical drawings. Students use the AutoCAD drafting program to prepare a complete set of working drawings. Students will learn how to draw and dimension orthographic views, sectional views and pictorial drawings.

CAD 110 is a basic computer drafting course that would be useful to students interested in any Community College technology or trades programs and university programs such as Engineering and Forestry. Students interested in the building trades, manufacturing, or electrical areas would also benefit from this course.

COMPUTER SCIENCE 110

This is a computer programming course. The objectives of this course are to introduce students to the world of computers and their impact on society, computer science concepts, and fundamental problem-solving skills. Course emphasis is on using Visual Basic computer language and problem-solving skills. Students will acquire the skills needed to write computer programs and solve computer related problems.

COMPUTER SCIENCE 120***Desired Prerequisite: Computer Science 110***

Computer Science 120 is recommended for students with a strong interest in computer programming. Students will learn the basic syntax of the Java language, program Java applets, and write simple programs using object-oriented design principles. This course provides a good foundation for students who wish to pursue a post secondary program in computer science.

COOPERATIVE EDUCATION 120

Students must provide their own transportation from their worksite.

Limited enrolment therefore Grade 12 students only, Application Process

In order to enrol in Cooperative Education, Grade 12 students must apply with references, and are screened by an interviewing committee. Successful applicants will be those students who have achieved academically in subject areas relating to the specific field of business or industry they wish to explore. There is limited enrolment in the course.

Cooperative Education is offered during one semester only and is a two-credit course. This course provides the "hands-on" experience that extends the learning process beyond the school into the work place. It is a course that integrates classroom theory with practical experience and learning in the working world. Approximately 70% of course time will be at the workplace. Students are placed in work place where they are provided with challenging tasks and responsibilities and they learn by doing. The course is based on a partnership between the school and business/industry, and involves the participation of students, teachers, employers and employee supervisors.

CULINARY TECHNOLOGY 110

The purpose of Culinary Technology 110 is to give students life-long learning and employability skills that may be transferable to future training in the food service and hospitality industries. Areas of study are nutritious menu planning; sanitation, safety and first aid in the food preparation area; organization for efficiency; standardizing for cost and quality; food preparation to produce standards of excellence; service salesmanship; food service industry and employment. Culinary Technology 110 explores introductory culinary principles and techniques used in baking.

CULINARY TECHNOLOGY 120***Prerequisite: Culinary Technology 110***

This course is designed to give students life-long learning and employability skills that may be transferable to future training in the food service industry at an advanced level.

Areas of study will focus on menu planning for food service outlets, safety and sanitation skills to protect the consumer and employee; industrial food service equipment and service floor plans; computerized standardization; food preparation techniques to improve efficiency and productivity; front of house business operation; outside influences on a successful food service career. Culinary Technology explores the advanced principles and techniques used in meat cookery, soups, flavouring, and dessert preparation.

CYBERSECURITY 120

In Cybersecurity 120 (CYBER120) students will be actively engaged in the design, development and evaluation of defensive cybersecurity projects, including awareness, concepts and challenges. Students will demonstrate operational skills specific to supporting and securing digital technology through hands on activities.

DIGITAL PRODUCTIONS 120

Digital Technologies 120 is a skills-based course designed to introduce you to cutting edge technology and techniques used in the multimedia industry. Students will study Web development, digital animation and digital audio. The skills that are developed allow students to build complex Web and multimedia productions.

ELECTRICAL WIRING 110

This is a residential wiring course with an emphasis on the lighting and power circuits normally found in a single-family dwelling. Students will progress from a study of the basic equipment, supplies and techniques used in residential wiring to the design and placement of the total electrical circuit requirement of a single-family dwelling as prescribed by the Canadian Electrical Code. This course will be of value and interest to those with a career objective in the electrical technology/electrical trade area.

ENTREPRENEURSHIP 110

Entrepreneurship 110 is designed for creativity and to help the student explore the skills, abilities, and personal characteristics evident in today's successful entrepreneurs, as well as develop individual aptitudes, attitudes and interests. The student will explore marketing in the 21st century, practice the assessment of opportunities, and be exposed to the corporate & ethical social responsibility of business. Students in this class will generate, select and evaluate ideas, and prepare carefully drawn up plans for putting these into action.

The course also provides a climate for opportunities to be realized such as the starting of one's own small business, entering competitions, and campus wide market possibilities.

FASHION DESIGN 120

This in-depth study of fashion and the fashion industry is designed to develop the student's interest and enthusiasm for a possible career in the apparel industry, and to improve knowledge and awareness of personal appearance. The course will cover topics including the psychosocial aspects of clothing, history of fashion, the application of design elements and principles in fashion, wardrobe planning, application of colour theory, fashion drawing, and basic textile and clothing construction.

FRAMING AND SHEATHING 110

This course is designed for students thinking of or exploring the option of a career in the construction industry. Principles of construction along with methods and materials used in wood frame construction are the focus.

Students gain hands on experience with layout, cutting and fabrication of structural components. This includes the framing of floors, walls and roof systems following industry standards. Students gain practical work experience in these construction processes by building sheds and/or decks. This course may also be of interest to those that wish to develop skills and knowledge for personal interest perhaps to build their own projects along with house repairs and home renovations in the future.

HOSPITALITY & TOURISM 110

Hospitality and Tourism 110 explores the fastest growing sector of the Canadian economy, the Hospitality and Tourism Industry. Students will explore eight sector of the Travel Industry which includes: Accommodations, Food and Beverage, Adventure Travel and Recreation, Events and Conferences, Travel and Trade, Tourism Services and Transportation. Students will learn the theories related to the Industry. The historical aspects of the profession will be explored to determine the present and future trends of travel and tourism. The student will have an opportunity to develop skills in the area of professional hospitality, customer relations and quality customer service. These transferable skills may be used for any future employment opportunity. The travel focus will be on the five scenic drives in New Brunswick.

HOUSING AND INTERIOR DESIGN 120

The purpose of this course is to assist students in the knowledge and application of basic design principles and guidelines, to develop sensitivity to good design and a discriminating taste. The course touches on types of housing, basic floor plans, furniture (styles, arrangements and discriminating purchases), plus a focus on the principles and elements of design. This course would be of interest to students who wish to pursue studies in the fields of architectural design or interior design and decorating.

INFORMATION TECHNOLOGY 120

Information Technology 120 focuses on the introduction of tools and strategies to engage students in authentic learning patterns and problem-solving situations, provides a foundation for transforming personal learning and gaining an understanding of open source and proprietary software, and addresses the acceptable internet/copyright rules and conventions used for exchanging information. Learning in this manner enables students to address cross curricular and community orientated *real* problems rather than just practising software/tools and procedural operations.

Students are encouraged to develop new thinking and learning skills while determining effective methods of working and solving problems individually and collaboratively. In addition, students will design and create information products that demonstrate an understanding of ICT concepts and processes, solve problems, share knowledge globally, and experience the social and ethical implications of ICT. Finally, students will demonstrate their knowledge and understanding of the ICT concepts, issues, and processes necessary to create meaningful information data products.

INTERNAL COMBUSTION ENGINES 110

This course provides for the study of the operation of the internal combustion engine including the construction, theory of operation, and function of its systems. Students disassemble and assemble engines, checking, measuring, servicing, and repairing components and systems. Emphasis is placed on the development of basic skills essential for persons entering the motor vehicle service trades and other allied occupations including engineering. This course should be of interest to students interested in entering or learning about the opportunities and requirements of the motor vehicle service industry and students with a general interest in mechanical principles.

INTRODUCTION TO ACCOUNTING 120

The focus of Introduction to Accounting is to provide an overview of the total process of accounting cycle. Students will learn essential accounting principles in order to participate in a society influenced by financial and business decisions. Students will better manage personal finances, understand obligations of business owners and make informed decisions concerning life careers and choices. The intention of this course is to encourage students to further their education in post-secondary business studies.

INTRODUCTION TO APPLIED TECHNOLOGY 110

This is an exploratory course for Grade 10 students only.

This course is designed as an introduction to the trades. Students will gain some insight into the workings of the following disciplines; wood working, metals, electrical wiring, drywall and small engines. This course will be attractive to those that like to do things with their hands or have an interest in tools and a mechanical aptitude. Others may discover through this course that they are naturally mechanically inclined. This is a very good selection for students that are setting themselves up for future trade type courses. With this course there is a materials fee for take home projects.

INTRODUCTION TO ELECTRONICS 110

This course allows the student to explore electron behaviour in simple and complex circuits and to investigate its behaviour in direct current devices under laboratory conditions. This course will also explore electronics, introducing basic electronic components such as relays, diodes, transistors, capacitors and power supplies along with basic electronic circuitry. Lab experiments are simulated on the computer and built on proto boards. Introductory electronics will be of interest to students with a career objective in the electrical occupational area as well as those who plan to continue their education at the technical or engineering level.

NOTE: This course may be selected as a Science credit

METALS FABRICATION 110 (WELDING)

This welding course is concerned with the process used in industry to cut, form and fasten metal. Emphasis is placed on the development of basic skills needed to use electric-arc and oxyacetylene welding and cutting processes including the preparation of material for welding. Machines and processes used to layout cut and form sheet metal are also included. The course should appeal to students interested in entering occupations in metal working, mechanical service, and maintenance resource industries.

METALS PROCESSING 110

This course is a study of machine shop processes used in the manufacture of metal products. Proper operating instruction will be given on a variety of machine tools common to the machine shop trade. Students will apply theory as well as develop practical skills through the production of practical projects. Instructional time will be divided between classroom theory and practical labs. This course will benefit and appeal to a variety of students, such as those interested in pursuing a career in the metals processing areas, those considering a future education in mechanical engineering or drafting technology areas, and those who would like to explore this area for personal interest or career guidance reasons.

METALS PROCESSING 120

Prerequisite: Metals Processing 110

This course is designed to provide advanced training in the metals processing area for those students who have successfully completed metals processing 110. Metal Processing 120 continues to introduce students to both introductory and advanced skills and knowledge required to pursue post-secondary learning in the metals

trades. Students enrolled in this course are encouraged to work both independently and in teams, while achieving specific curriculum outcomes.

MILL AND CABINET WORK 120

Students who like hands on projects will be attracted to this course as they will be introduced to materials and practices that are common to both the furniture and cabinetmaking industry. While learning to use tools and machinery in a well-equipped shop the students will produce finished take home projects. Also, they will gain experience with planning, costing, machining and fabrication processes common to the woodworking industry. The course should appeal to students interested in entering construction and woodworking occupations or with a general interest in woodworking for self interest. With this course there is a material fee for take home projects

MICRO ELECTRONICS 120

Digital electronics, the integrated circuit and the microprocessor have introduced the micro electronics revolution. Today digital circuits are an integral part of the automobile, communications, equipment, computers, calculators, audio systems, etc. During this course, the students will be introduced to digital electronics, digital numbering systems, binary logic gates, combination circuits, sequential circuits, digital systems, microprocessor basics, and interfacing. This is a hands-on course; all theories are computer simulated and are applied in the lab.

NOTE: This course may be selected as a Science credit

POWER TRAIN & CHASSIS 110

Prerequisite: Internal Combustion Engines 110

This course is designed to introduce students to the service and maintenance of the automobile chassis and power train. Emphasis is placed on the function, repair, and replacement of components. Topics include suspension assemblies, brakes, steering, wheel bearings, tires, and transmissions, differential and drive lines. Students seeking admission to the motor vehicle service industry as well as those with a general interest in mechanical principles should benefit from this course.

RESIDENTIAL FINISH 120

This is a good course choice for those wishing to pursue a career in the residential construction industry or those wishing to gain knowledge and skills for their own self interest, perhaps laying a hard wood floor, repairing drywall or installing siding. This course includes installation practices for insulation, flooring, stairs, drywall, doors, windows, roofing and various exterior finishes for housing. Students will gain experience estimating materials and labour while enhancing some practical skills. This course will introduce the students to a wide diversity of options in the construction industry.