SUSSEX REGIONAL

HIGH SCHOOL

COURSE SELECTION HANDBOOK 2019 - 2020

Table of Contents

General Comments

Course Selection

Students are encouraged to select courses under the advisement of both parents and teachers. It is important to make wise choices when registering remembering that the number of classes in each subject depends on the number of students selecting that course each spring. Therefore the school does not decide the number of courses – you do! A sufficient number of requests will be required for a course to be offered (especially Level 1 and elective courses).

Terminology

Compulsory: Required; needed in order to graduate

Recommendation: A course a student must pass before enrolling in a more advanced course. For example, Modern History 112 must be passed prior to taking World Issues 120.

Local Option: These are courses that have been specifically created by the teachers of SRHS to meet the desires of the student body of SRHS. All local option courses have been approved by the New Brunswick Department of Education and Early Childhood Development. Students may only count two local option courses towards their graduation credit requirements.

Course Level Descriptions

LEVEL 0 - A course with an assigned level. (Some "0" levels meet the requirements for post-secondary entrance – others do not.)

LEVEL 1 - Enriched courses designed for students with an exceptional talent and interest in the subject. In determining University ranking, students in Level 1 courses will be ranked higher.

LEVEL 2 - Designed for students with good study skills and average to above-average ability and interest in the subject area.

LEVEL 3 - Designed for students who are interested in the basic, practical aspects of the subject. Students who achieve success in Level 3 courses may be eligible to apply to some programs at post-secondary institutions.

Independent Study Credit

Independent study credits are intended to:

- Provide increased opportunity for individualization of programming recognize and provide credit to students who initiate and assist in the development of courses tailored to their needs, abilities, and interests.
- Provide opportunities for greater flexibility in the high school program.

An Independent Study may include:

- A prescribed course in the province of New Brunswick.
- A topic or theme that extends the curriculum of a prescribed course.
- Topic or theme chosen by the student including work that combines a number of disciplines.

A student may earn one independent study credit in either grade 11 or 12. Permission for a student to pursue an independent study credit is granted at the discretion of the school within the Department of Education guidelines.

Online Courses

The New Brunswick Department of Education and Early Childhood Development now offers a number of courses on-line. The selection of courses available online varies each semester as such students are asked to consult the Distance Education website (**https://www.gnb.ca/0000/as/dl-e.asp**) for a listing of potential courses. Any student wishing to take one of these courses will be required to work independently under the supervision of a school mentor. Acceptance into one of these courses does require students to complete an application process. Students who are interested in applying to this program should go to the Distance Education website and take a readiness quiz to help determine if they are a suitable candidate for this program.

Distance Education Website: https://www.gnb.ca/0000/as/dl-e.asp

Challenge for Credit

Challenge for Credit is an opportunity to recognize prior learning and to acknowledge this through the granting of a credit.

This option is available to:

Any Student in grade 11 or 12 enrolled in a New Brunswick high school who, outside school have met all the learning, process, interpersonal, participation objectives or outcomes/requirements of a course.

This option is available in:

Any prescribed course in the New Brunswick public school system in grades 11 and 12.

Provincially Recognized Challenge for Credit Examples:

1) Students who have completed **Level 4 Cadet training** (in Air, Army, or Sea) can obtain an Outdoor Pursuits 110 credit. Students will be required to complete the application form (in Guidance Department), as well as show signed confirmation of the completion of this program.
2) Completion of the **Scout Exploration Activity Award** can earn a student credit in Outdoor Pursuits 110. A confirmation letter of achievement as well as the completion of the application form found on the NB Scouts website http://nb.scouts.ca/files/Scout_Fast_Track_Form.pdf will be required.
3) Completion of **The Duke of Edinburgh Young Canadians Challenge** at either the Gold or Silver level can earn a student a credit in Outdoor Pursuits 110. Students interested in challenging for this credit will be required to complete the application form found in the Guidance Department well as provide written confirmation of completion of this program.

General Challenge Application Process:

Student must apply in writing to **Mrs. Lauridsen within two weeks of the beginning of a course.** The application will include clear evidence of appropriate prior outside learning congruent with the outcomes of an identified New Brunswick course and **should be supported by** at **least one pedagogical professional**. The school principal in conjunction with the guidance department and one teacher and in consultation with a student and his/her parents(s) will discuss the validity of the application.

New Brunswick High School Graduation Requirements

- **Minimum of 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 Foundation of Mathematics 11 **(1 credit)**
  - ✓ Modern History grade 11 **(1 credit)**
  - ✓ Science **(1 credit)** from:
    - Automotive Electrical Systems 120
    - Biology 11
    - Chemistry 11
    - Human Physiology 110
    - Introduction to Electronics 110
    - Introduction to Environmental Science 120
    - Physics 11
    - Physical Geography 110
    - Robotics and Automated Technology 120
  - ✓ Fine Arts/Life Role Development **(1 credit)** from:
    - Cooperative Education 120
    - Entrepreneurship 110
    - Graphic Art & Design 110
    - Individual and Family Dynamics 120
    - Music 11/12
    - Outdoor Pursuits 110
    - Physical Education Leadership 120
    - Reading Tutor 120
    - Theatre Arts 120
    - Visual Arts 11/12
    - Wellness through Physical Education 110
- **Students must meet the requirements of the prescribed common curriculum of the 9/10 program as outlined in the Grade 9/10 Companion Document.**
- **Success on the English Language Proficiency Assessment (ELPR) is required.**

  Students must acquire a literacy credential by achieving acceptable or better on the reading and writing components of the ELPA in grade 9. Students who are unsuccessful will have the opportunity to rewrite in their grade 11 and 12 year. Candidates are provided further support in grade 10.
- **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.**
- **Students must have an English 12 and a minimum of four other grade 12 credits.**

Graduation Years: Grade 11 and 12 Courses

English Language Arts

Canadian Literature 120
English Language Arts 111/112/113
English Language Arts 121/122/123
Journalism 120
Media Studies 120
Women, Media and Culture 120
Writing 110

Mathematics

Calculus 120
Financial and Workplace Math 110
Financial and Workplace Math 120
Foundations of Mathematics 110
Foundations of Mathematics 120
Pre-Calculus 110
Pre-Calculus A 120
Pre-Calculus B 120

Skilled Trades and Technology

Advanced Technology 120
Automotive Electrical Systems 120
Automotive Exploration 120
Business Org. & Management 120
Child Studies 120
Computer Aided Design 110
Culinary Technology 110
Culinary Technology 120
Computer Science 110
Digital Production 120
Early Childhood Services 110
Electrical Wiring 110
Economics 120
Framing and Sheathing 110
Hospitality and Tourism 110
Housing & Interior Design 120
Human Services 110
Information Technology 120
Internal Combustion Engines 110
Introduction to Accounting 120
Introduction to Applied Technology 110
Introduction to Electronics 110
Metal Fabrication 110
Milling and Cabinet Work 120
Nutrition for Healthy Living 120
Power Train and Chassis 110
Residential Finishing and Insulation 120
Robotics & Automated Tech. 120
Technology Support 110
Tune-up and Emissions 120

Social Sciences

Canadian Geography 120
Canadian History 121/122
FI Canadian History 121/122
FI Modern History 111/112
FI World Issues 120
Law 120
Modern History 111/112/113
Political Science 120
World Issues 120

Science

Biology 111/112
Biology 121/122
Chemistry 111/112
Chemistry 121/122
Human Physiology 110
Intro. to Environmental Science 120
Physical Geography 110
Physics 111/112
Physics 121/122

Fine Arts & Life Role Development

Cooperative Education 120
Entrepreneurship 110
Graphic Art and Design 110
Individual & Family Dynamics 120
Music 112/113
Music 122
Physical Education Leadership 120
Outdoor Pursuits 110
Reading Tutor 120
Theatre Arts 120
Visual Arts 110
Visual Arts 120
Wellness through Physical Ed. 110

French Immersion

French Immersion Language Arts 110
French Immersion Language Arts 120
French Immersion Lang. Arts 120

Local Option Courses

Advanced Wiring 120

Agricultural Science 120

Psychology 120

Second Language

Post-Intensive French 110
Post-Intensive French 120

French Immersion Course Requirements for a Certificate of Second Language Proficiency

French Immersion Students will be eligible for a French Immersion Certificate upon Graduation by completing the following courses:

Grade 9: Successful completion of Grade 9 French Immersion courses offered

Grade 10: Successful completion of Grade 10 French Immersion courses offered

Grade 11/12: Students will be required to take:

- French Immersion Language Arts 11 and 12
- French Immersion Modern History 11
- French Immersion World Issues 12 **or** French Immersion Canadian History 12

FIT Certificate (Basic) Requirements

Focus on Information Technology (FIT) Program is a Canada wide Certificate program from the Information and Communications Technology Council (ICTC). FIT provides students with the opportunity to develop technology and business/entrepreneurial skills with essential workplace skills and experience.

All students who achieve a FIT certificate are required to have two foundation courses. These two courses are:

- Information Technology 120
- Business Organization and Management 120

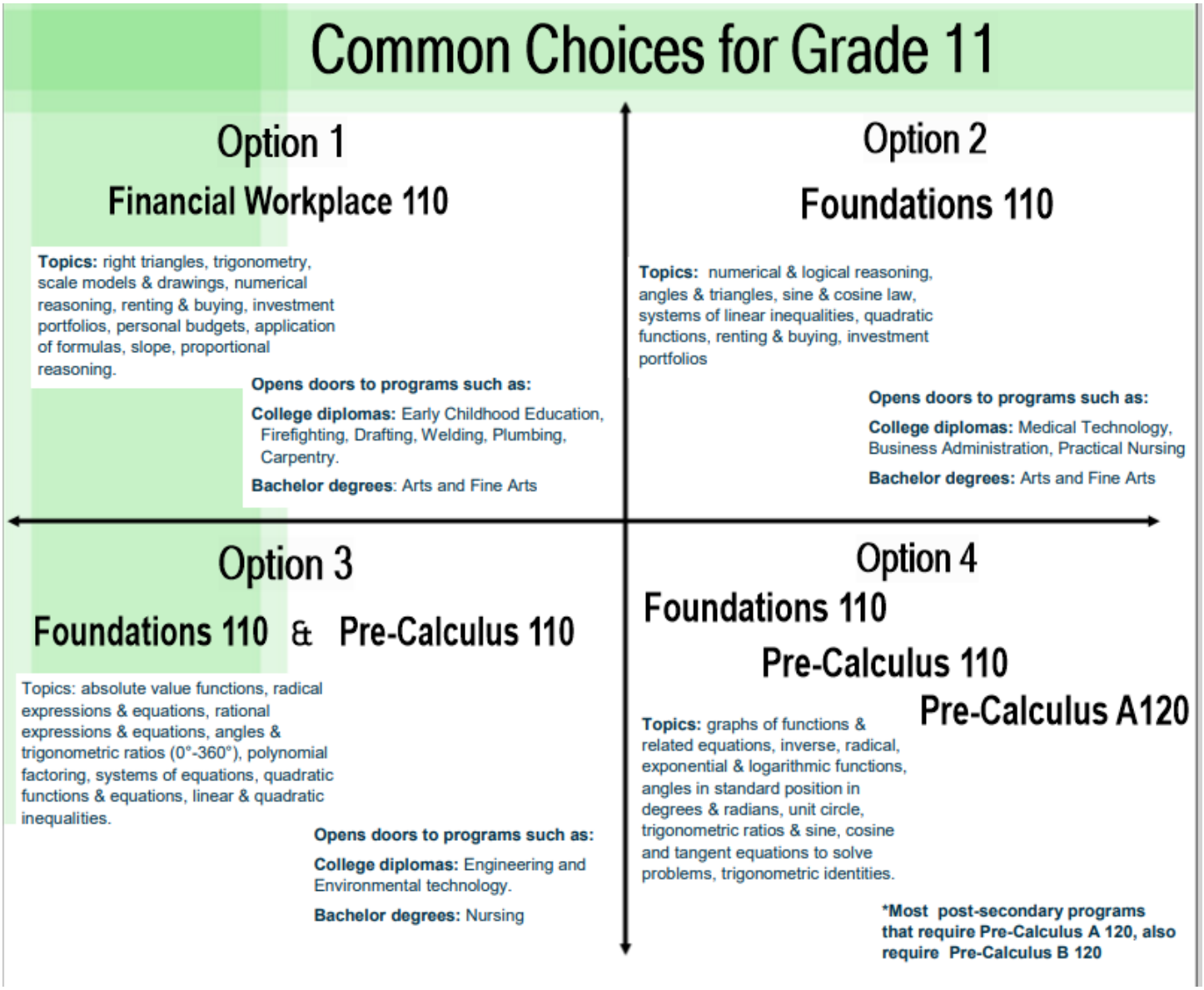
To achieve a certificate students need the two foundation courses **plus** one additional course from the stream below.

Students can achieve a FIT Certificate in one or more of the following streams:

- Business and Information Analysis (Entrepreneurship 110)
- Software Design and Development (Computer Science 110)
- Network and Systems Operations (Technical Support 110)
- Interactive Media (Digital Production 120 – Formally known as Digital Technology 120)

Courses do not need to be taken in any particular order in to achieve a Certificate. If you are interested in a FIT brochure, please see the Guidance website.

Design the Grade 11 and 12 Mathematical Pathways



*** You are not required to take a math course in grade 12***

Common Choices for Grade 12

Option 1

Financial Workplace 120

Topics: measuring, sine & cosine laws, properties of polygons, transformations of 2-D & 3-D shapes, small business finance, linear relationships, data interpretation, probability.

Supports:

College diplomas: Art and Design, Forest Technology, Business

- Have taken FW 110

Option 2

Foundations 120 Or Pre-Calculus 110

Topics: normal distribution, standard deviation, confidence intervals, set theory, conditional statements, probability, binomial theorem, polynomial, exponential, logarithmic & sinusoidal functions.

Opens doors to programs such as:

College diplomas: Engineering Technology, Computer Technician, Pharmacy Technology

Bachelor degrees: Nursing, Kinesiology, Business Administration, Economics, Psychology

- Have taken FOM110

Option 3

Pre-Calculus A120 & Pre-Calculus B120

Topics: arithmetic & geometric sequences & series, polynomial factoring & functions, reciprocal and rational functions, function toolkit permutations, combinations & binomial theorem, limits & conitnuity of functions.

Opens doors to programs such as:

Bachelor degrees: Science, Computer Science, Engineering, Mathematics

- Have taken FOM110 and PC110

Option 4

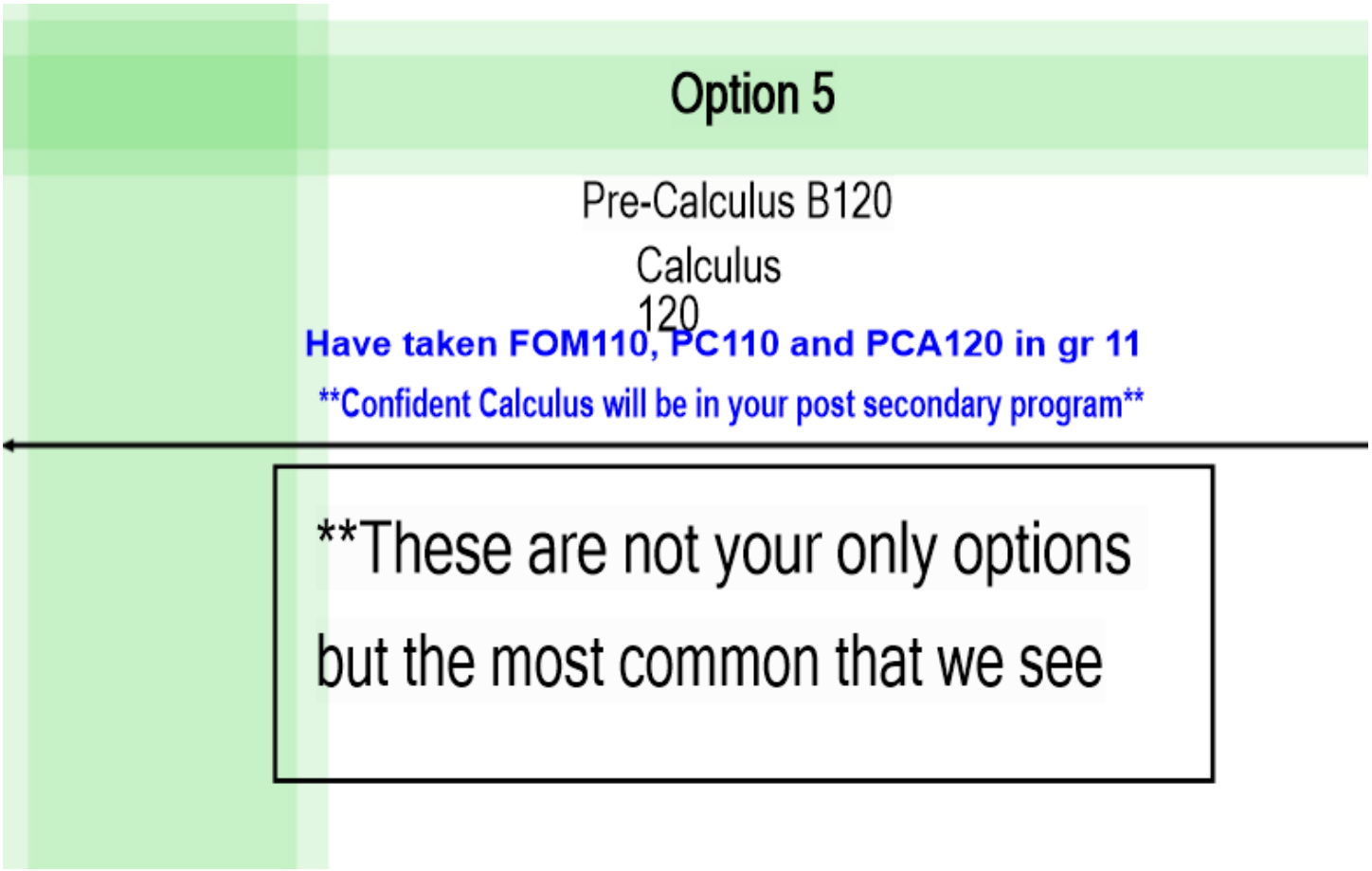
Pre-Calculus A120
Pre-Calculus B120
Calculus 120

Topics: rates of change, derivatives of functions, derivative rules, inverse trig functions, optimization problems, definite, integrals, antiderivatives, application of. integrals

Supports:

Bachelor degrees: Science, Computer Science, Engineering, Mathematics

- Want to take Calculus and did not take all required courses in gr 11
- Have taken FOM110 and PC110



Alphabetical Course Listings

A

Advanced Technology 120

Value: 1 credit

Recommendation: ***Science 10*** *(with a minimum mark of 70%) and a pre-/co-requisite of* English 112/111

Advanced Technology deals with the practical application of Environmental Science with respect to energy conservation, alternative energy and efficient building design. Students will learn how to calculate electrical power energy and cost. Students will learn ways to reduce or save energy using different devices. The course has a large emphasis on group project work and presentations. Some projects that may be worked on are sustainability audit, energy efficient building design and/or alternative energy system design.

Advance Wiring 120 *(Local Option Course)*

Value: 1 credit

Recommendation: ***Electrical Wiring 110***

This course is an extension of 110 Electrical Wiring. Topics of residential wiring, safety, switching circuits, conductor material and sizes, service and grounding requirements, wiring methods, installation of electrical equipment, installing of lighting equipment, and basic circuits using buzzers and chimes, entrance systems, raceway wiring, electric heat, and Canadian Electrical Code are practiced as hands-on projects. This course is useful for students who are considering trades as a career option.

Agricultural-Science 120 *(Local Option Course)*

Value: 1 credit

Agricultural-Science 120 gives the student an appreciation of how and where food is produced. The major units covered are: Soils, Beef, Dairy, Swine, Sheep, Farm Safety and Forages. There are several field trips planned throughout the duration of the course. Also, each student will have a project to do that is on an aspect of agriculture that is not covered during the semester. ***NOTE: This course may not be used as a Science credit toward graduation.***

Automotive Electrical Systems 120

Value: 1 credit

Recommendation: Science 10

This course is designed to introduce the student to the theory and operation of the basic service of the automotive electrical systems. The student will study the basic function of electrical system components and practice basic service procedures. **Note: this course may be used as a science credit.**

Automotive Explorations 120

Value: 1 credit

This is strictly an introductory course for the student not interested in taking or having taken any other automotive course. Recognizing that an automobile is generally the second highest priced purchase in one's life, this course is designed to meet the needs of students who have particular interests in the maintenance of the automobile. The course will consist of basic operation procedures on electrical components, lubrication, tires, exhaust systems, cooling systems and other basic care of the automobile.

B

Biology 111

Value: 1 credit

Recommendations: ***Science 10*** *(with a mark of 80 % or greater is recommended), and Pre-/Co-Requisite of* ***Foundations of Mathematics 110*** *and* English **111/112.**

Biology 111 is a one semester enriched introductory course to the field of Biology. This course requires students to increase their factual knowledge along with increasing their investigative skills. Topics that will be covered in this course include biodiversity, cellular matter and energy flow, energy and matter exchange by humans and other organisms, and an introduction to physiology. The topics covered will be the same as Biology 112, although the depth of coverage will be greater. This course is intended for students with a special interest in Biology and a commitment to independent work. Laboratory work supplements regular classroom activities, concluding with an extensive dissection.

Biology 112

Value: 1 credit

Recommendations: ***Science 10*** *(with a mark of 70% or greater is recommended), and Pre-/Co-Requisite of* ***Foundations of Mathematics 110*** *and* English **111/112.**

This is an introductory course in Biology. Students enrolled in this course will be expected to maintain the literary standards equivalent to that of a level 2 English course. Topics that will be covered in this course include biodiversity, cellular matter and energy flow, energy and matter exchange by humans and other organisms, and an introduction to physiology. Course topics will be supplemented by laboratory work, concluding with an extensive dissection.

Biology 121

Value: 1 credit

Recommendation: ***Biology 111*** *(Chemistry 11 is recommended) & Pre-/Co-Requisite:* ***Foundations of Math 110***

This enriched one-semester course includes the following topics: mitosis, meiosis, genetics, DNA structure and replication, protein synthesis, human anatomy, sexual reproduction, and evolution and origins of life. These topics will be covered to a greater depth than in Biology 122 and will require students to work more independently to increase their depth of understanding and improve their investigative skills. The course includes research papers, class presentations, as well as laboratory investigations which conclude with an extensive dissection. This course is intended for students with an interest in pursuing Biology at the post-secondary level.

Biology 122

Value: 1 credit

Recommendation: ***Biology 112/111*** *& Pre-/Co-Requisite:* ***Foundations of Math 110***

This course is open to students who have successfully completed Biology 112 or 111. It is strongly recommended that the students enrolled in Biology 122 have successfully completed Chemistry 112, to have a strong foundation for a better understanding of the Biochemistry and Molecular approach to this course. The course topics include mitosis, meiosis, genetics, DNA structure and replication, protein synthesis, human anatomy, sexual reproduction, and evolution and origins of life. Laboratory work supplements regular classroom activities, concluding with an extensive dissection.

Business Organization & Management 120

Value: 1 credit

NOTE: Counts toward FIT Certificate

This course is designed for university preparatory students in their last year of high school. Students should gain an understanding of how the business system is managed in Canada, emphasis being placed on business problems as seen through the eyes of management. Projects, case studies and problem solving are a major part of the course. The major topics included are: business ownership, small business management; the functions and problems of management; financial management and control; production; marketing procedures; business, government and society; and future careers in business.

C

Calculus 120

Value: 1 credit

Recommendations: ***Pre-Calculus A 120*** *and* ***Pre-Calculus B 120***

This is the last course offered in the Pre-Calculus Pathway, and follows *Pre-Calculus B 120*. This course develops the concepts of average and instantaneous rates of change. Derivatives are determined by applying the definition of a derivative and the derivative rules including the Chain Rule, and are determined for trigonometric functions. Limits and derivatives of exponential and logarithmic functions are found. Calculus techniques are used to sketch graphs of functions, and to solve optimization problems. Problems are solved involving inverse trigonometric functions, involving related rates and involving the application of the integral of a function from a variety of fields. The definite integral and the antiderivative of a function are determined.

This course is recommended for students interested in post-secondary programs in science, engineering and mathematics, though it may not be a required entrance requirement.

Canadian Geography 120

Value: 1 credit

Canadian Geography 120 is a study of the ever-changing cultural and physical landscapes of Canada and how they impact on each other. It examines physical systems and how they relate with human structures and systems. It investigates current issues that are important to Canadians, including environmental concerns. Geographic understandings and skills are integrated throughout the course.

Canadian History 121

Value: 1 credit

Recommendation: ***Modern History 111/112***

Canadian History 121 provides students, planning on attending university, with opportunities to develop skills needed for success in any university program. Materials from Canadian history are used to develop skills in areas of critical thinking, research, organization, questions, analysis, creating and proving hypotheses, essay writing and seminar presentation.

Canadian History 122

Value: 1 credit

Recommendation: ***Modern History 111/112***

Canadian History 122 is designed to provide opportunities for students to study, discuss and write about the major events in modern Canadian history. Areas of study include pre and post-Confederation Canada; westward expansion, the Canadian identity, immigration, our role in the Boer War and both world wars, and our role in the Cold War. Assessment includes tests, projects, essays and presentations.

Canadian Literature 120

Value: 1 credit

The goal of the *Canadian Literature 120* curriculum is to promote an interest in important Canadian literature and other creative texts. The course is for students who have successfully completed Grade 10 English Language Arts, who demonstrate an interest in literature and deconstructing texts, and who wish to explore Canadian identity through a variety of literary texts worthy of study and appreciation.

Chemistry 111

Value: 1 credit

*Recommendation: Completion of **Science 10**, **Geometry, Measurement and Finance 10, Numbers, Relations and Functions 10**, and **Foundations of Math 110** (pre-/co-requisite) with a mark of 80% or above in each.*

This course covers the same topics as the Chemistry 112 but will move at an accelerated pace allowing time for more complex and challenging problems, and extension of topics through investigative techniques and research.

Chemistry 112

Value: 1 credit

*Recommendation: Completion of **Science 10**, **Geometry, Measurement and Finance 10**, **Number, Relations and Functions 10,** and **Foundations of Math 110** (pre-/co-requisite) with a mark of 70% or above in each.*

This course is designed to give a working knowledge of chemistry by relating various properties of matter to the basic structure of matter. Students will study such topics as the handling of numbers and calculations in science, the factor-label method of problem-solving, basic vocabulary terms, the mole concept, atomic structure, electron configuration, periodic properties of the elements, chemical bonding, chemical change, stoichiometry, properties of solutions and gases, and proper procedures in the laboratory. It is expected the students should have a good working understanding of math topics and skills introduced in grade 10 math.

Chemistry 121

Value: 1 credit

*Recommendation: **Chemistry 111** and **Foundations of Mathematics 11** with a mark of 80% or above in each. (Chemistry 112 will be considered as a recommendation on an individual basis.)*

This course covers the same topics as the Chemistry 122 but will move at an accelerated pace allowing time for more complex and challenging problems, and extension of topics through investigative techniques and research.

Chemistry 122

Value: 1 credit

*Recommendation: **Chemistry 112** and **Foundations of Mathematics 110**, each with a have a mark of 70% or greater.*

Chemistry 122 builds on and is a continuation of Chemistry 112. Topics to be discussed include: thermo chemistry, reaction rates, chemical equilibrium, chemical bonding, organic chemistry, and acid-base chemistry. Chemistry is a required course for most post-secondary courses in science.

Child Studies 120

Value: 1 credit

Child Studies 120 is an exploration of Child Development from prenatal through to age twelve. Through research and observations we will explore how children grow intellectually, physically, socially and emotionally at each stage. Using developmental theories by Maslow, Freud, and Erikson we will learn how help children grow to their full potential. Students interested in working with young children or learning more about children for personal interest would enjoy this course.

Computer-Aided Design (CAD) 110

Value: 1 credit

An introductory course open to 11th and 12th year students who would like to know how house plans and mechanical parts are drawn. This course deals with technical drawing. No artistic skill is required; however, art skills can be improved! In-depth use of **Auto CAD LT** is a feature of this course. This course is recommended to all students, but especially to students wishing to further their education in architecture, engineering, interior design or graphic communications related careers. The Auto-Cad computer program is the standard for design and engineering.

Computer Science 110

Value: 1 credit

NOTE: Counts toward FIT Certificate

Computer Science 110 is a revamped course for today's modern coding practices. Using introductory coding language students will learn about variables, operators, methods and functions, loops and decisions, string manipulation and graphics. Students planning to study computer science or engineering at a post-secondary institution will find this course helpful.

Computer Science 120

Value: 1 credit

The Computer Science 120 course extends the principles learned in Computer Science 110. Students will primarily focus on object-oriented programming, using Java as the coding language. Any students wishing to continue in Computer Sciences, Engineering, or Business studies would find the Computer Science courses beneficial.

Cooperative Education 120

Value: 2 credits

*NOTE: Only offered to students in their **graduation year.***

This course provides experiential work-based education that extends the learning process into the workplace. It is a course that integrates classroom theory with employability and career skill development thereby furthering the career exploration process of youth. After completing the pre-employment course component, students are placed in work where they are provided with challenging tasks and responsibilities and learn by doing. Students spend the equivalent of two periods (2 credits) normally on a daily basis, at the workplace. The course is based upon a collaborative partnership between the school and business/industry and involves the participation of students, teachers, employers and student supervisors.

SPECIFIC STUDENT RESPONSIBILITIES FOR CO-OP EDUCATION INCLUDE:

1. Regular attendance and punctuality at school and the training station (approximately 2 hr/day).
2. Appropriate dress and behavior on the job.
3. Keeping a daily log record of hours worked and Journal
4. Satisfactory progress in learning at the training station as outlined by the specific training profile.
    a. Explore a tentative career choice
    b. Develop self-confidence and skills that will allow you to work effectively in the workplace
    c. Develop greater awareness of the needs of business, industry and community services
    d. Facilitate the transition from school to work
    e. Become involved in an exciting, innovative way to earn school credits

PLEASE NOTE: Entrance to the course will be by means of an <u>application</u> and <u>interview</u> process.

Culinary Technology 110

Value: 1 credit

The Culinary Technology course is an entry level hands-on food service training course. Culinary skill sets include; industry organization, standards, safety and sanitation, use of tools and equipment, and food preparation. Students will

study the theory of each skill and then be encouraged to practice those skills through enterprise activities. Food Preparation areas of study may include Quick Breads, Cakes and Cookies. Yeast breads and meal planning with be explored.

Culinary Technology 120

Value: 1 credit

Recommendation: ***Culinary Technology 110***

Culinary Technology 120 is a continuation of Culinary Technology 110. This course focuses on safety and sanitation, food supply, influences on the menu, meal planning, and additional food preparation skills. Theory includes the planning of quality meals, ordering, pricing, and preparation service.

CyberSecurity and Tech Support 110

Value: 1 credit

This introductory course combines both theory and hands-on, project-based instruction to prepare students to build, administer, and secure computers and other digital technologies. Topics will include computer hardware and maintenance, operating system configuration and maintenance, networking and securing devices, professional ethics and conduct, and cybersecurity dangers and responses. Students taking this course are expected to develop skills involving computational thinking, group work, and the ability to explain technical concepts in non-technical language.

D

Digital Production 120

Value: 1 credit

NOTE: Counts toward FIT Certificate

This course develops competencies to work in the rapidly growing online world, including web design and development, social and mobile media, interactive games and e-commerce. The course blends business, technology, and artistic skills to address the important new opportunities organizations are facing in the online world.

E

Early Childhood Services 110

Value: 1 credit

The overall aim of this course is to help students realize and appreciate the role parents and caregivers play in a child's development. Students will gain a greater understanding of how children develop emotionally, socially, intellectually and physically through the first five years of life. Through playschools planned and operated by students, students will participate in playschools for children ages 3-5 with additional observation of infants and toddlers. If you are interested in working with children as a career or becoming an informed parent, this is a course for you. Post-secondary employment opportunities will be researched as well.

Economics 120

Value: 1 credit

Economics 120 provides a basic understanding of our economic system and how it works. The role of Canada's major economic institutions and how they interact is examined. Some of the topics covered include business organization, supply, demand, and the market, money and the banks, international trade, the stock market, and performance of the Canadian economy. This course will be of special interest to those considering a career in Business or Commerce.

Electrical Wiring 110

Value: 1 credit

This course is for all students who want to learn about circuitry. No experience is necessary. Students enrolled in this course will teach the various circuit arrangements used to control lights and receptacles in residential applications. Theory and skills are developed through hands-on wiring projects. Successful completion of 110 (Recommendation to 120) and 120 Advance Wiring has been proven very helpful for students who decide to become a journey-person in the construction trades.

English 111

Value: 2 Credits (full year course)

*Recommendation: **English 10**, Minimum of 80% or recommendation of Year 10 Teacher.*

English 111 is a course designed for students whose aptitudes and interests in language and literature are above average. This course will provide an enriched variety of experiences with language and texts to challenge and refine students' competencies. Greater range and depth of the content plus more independent and interdependent experiences will accommodate students' interests and talents. Higher levels of thinking are stressed such as analysis, interpretation, evaluation and synthesis. Skills in the appreciation of literature are further developed. Students will continue to develop and maintain skills in paragraphing, sentence combining, vocabulary building, reading, formal essay writing and conducting research. The completion of numerous pieces of process writing based on Write Traits (pre-writing, rough copy, editing, good copy) and its marking rubric is mandatory. Two of these will be the literary essay with proper use of citations. An additional two pieces must be formal research essays which will demonstrate correct use of MLA and APA format. There will be at least two oral presentations. These are minimum requirements and do not represent the number of writing assignments expected of students at this grade level.

English 112

Value: 2 credits (full year course)

*Recommendation: **English 10** (Required mark of 70% or recommendation of teacher)*

Students will continue to develop and maintain skills in paragraphing, vocabulary building, sentence combining, reading and formal essay writing. Higher levels of thinking are stressed such as analysis, interpretation and evaluation. Skills in appreciation of literature are developed, with a view to preparing for the 122 program. Students will continue to develop and maintain skills in paragraphing, sentence combining, vocabulary building, reading, formal essay writing and conducting research. The completion of numerous pieces of process writing based on Write Traits (pre-writing, rough copy, editing, good copy) and its marking rubric is mandatory. Two of these will be the literary essay with proper use of citations. An additional two pieces must be formal research essays which will demonstrate correct use of MLA and APA format. There will be at least two oral presentations. These are minimum requirements and do not represent the total number of writing assignments expected of students at this grade level.

English 113

Value: 2 credits (full year course)

*Recommendation: **English 10***

Students will continue to develop and maintain skills in paragraphing, vocabulary building, sentence combining, reading, speaking and essay writing. The completion of numerous pieces of process writing based on Write Traits (pre-writing, rough copy, editing, good copy) and its marking rubric is mandatory. There will be at least two oral presentations. Group and individual projects based on class work become an increasingly important part of the program. The study of a novel, as well as short fiction and non-fiction, will be integral in the course. Workplace preparation is also a focus.

English 121

Value: 1 credit

Recommendation: ***English 111/112****, Minimum of 80% or recommendation of Year 11 teacher.*

English 121 is a course designed for students whose aptitudes and interests in language and literature are above average. This course will provide an enriched variety of experiences with language and texts to challenge and refine students' competencies. Higher levels of thinking are stressed such as analysis, interpretation, evaluation and synthesis. Greater range and depth of the content in addition to more independent and interdependent experiences will accommodate students' interests and talents. Students will continue to develop and maintain skills in paragraphing, vocabulary building, sentence combining, reading and formal essay writing. The completion of numerous pieces of process writing based on Write Traits (pre-writing, rough copy, editing, good copy) and its marking rubric is mandatory. Three of these pieces must be formal essays written with proper use of MLA and APA format; one must be a research paper. There will be at least two oral presentations. These are minimum requirements and do not represent the total number of writing or speaking assignments expected of students at this grade level.

English 122

Value: 1 credit

Recommendation: ***English 112 or 111***

Students will continue to develop and maintain skills in paragraphing, vocabulary building, sentence combining, reading and formal essay writing. Skills in the appreciation of literature are developed, with focus on classic drama, a modern play, a literary period, novel studies and poetry. Higher levels of thinking are stressed such as analysis, interpretation and synthesis. In addition, skills in the appreciation of literature are further developed. The completion of four pieces of process writing (pre-writing, rough copy, editing, good copy) based on Write Traits and its marking rubric is mandatory. Three of these pieces must be formal essays written with proper use of MLA and APA format; one must be a research paper. There will be at least two oral presentations. These are minimum requirements and do not represent the total of speaking and writing assignments expected of students at this grade level.

English 123

Value: 1 credit

Recommendation: ***English 112 or English 113***

Students will continue to develop and maintain skills in paragraphing, sentence combining, vocabulary building, reading, speaking and essay writing. The completion of numerous pieces of process writing based on Write Traits (pre-writing, rough copy, editing, good copy) and its marking rubric is mandatory. There will be at least two oral presentations. Group and individual projects based on class work become an increasingly important part of the program. The study of a novel as well as the study of short fiction, non-fiction and media will be integral in the course. Workplace preparation continues to be a focus in this course as well.

Entrepreneurship 110

Value: 1 credit

NOTE: May be used as a Life Role Development Compulsory & Counts toward FIT Certificate

This course is open to any year 11 or 12 student. An entrepreneurship studies program is designed to nurture the business and innovative spirit in students. Students produce a product or service in a marketplace setting; loans are available to students, repayable on market day with profits remaining with students. Among the aims of the program are:

1. Assess the student's interest in aptitude for entrepreneurship activities.
2. Develop entrepreneurial skills and attitudes.
3. Understand the role of the entrepreneur.
4. Examine a wide range of entrepreneurship career options.

F

Financial and Workplace Mathematics 11

Value: 1 Credit

Recommendation: ***Geometry, Measurement and Finance 10***

This course is the first of two courses designed for entry into many trades and technical programs, and for direct entry into the work force. Concepts of right triangles, trigonometry, and angles of elevation and depression are applied to contextual problems. Scale models and drawings of 2-D and 3-D objects are constructed from various views and perspectives. Students are challenged to solve problems that involve numerical reasoning. Costs and benefits of renting and leasing and buying are explored, investment portfolios analyzed and personal budgets developed. Students manipulate and apply formulas in a variety of ways and solve problems using proportional reasoning and unit analysis.

Students have a choice of this course or **Foundations of Mathematics 11** to complete graduation requirements. This is a recommendation for **Financial and Workplace Mathematics 12**.

Financial and Workplace Mathematics 120

Value: 1 credit

Recommendation: ***Financial and Workplace Mathematics 110*** *or* ***Foundations of Mathematics 110*** *can serve as a recommendation for this course. This course completes the Financial and Workplace pathway.*

This is the second of two courses in the Financial and Workplace pathway designed for entry into post-secondary trades and technical programs, or for direct entry into the work force. Students explore the limitations of measuring instruments, and solve problems using sine and cosine laws and the properties of triangles, quadrilateral, and regular polygons as they relate to construction, industrial, commercial and artistic applications. Transformations of 2-D and 3-D shapes are identified, drawn with and without technology, and used to create, analyze and describe designs and to solve contextual problems. The viability of small business options are explored including expenses, feasibility, and factors that could impact on profitability. Linear relations are studied, including patterns and trends, graphing, creating tables of values, writing equations, interpolating and extrapolating, and solving problems. Students gain an understanding of mean, weighted and trimmed mean, median and mode, and explore the impact of outliers. They also compare percent and percentile, and explore probability. Opportunity is given to research and present an historical event or an area of interest that involves mathematics.

Framing and Sheathing 110

Value: 1 credit

The course is designed to develop knowledge and skills required in the construction of framed buildings. The methods, materials and skills used in framework from the foundation to the roof, including trusses, are covered. **There will be a lab fee of $15.**

French Immersion Canadian History 121

Value: 1 credit

*Recommendation**: French Immersion Modern History 111***

French Immersion Canadian History 121 provides students, planning on attending university, with opportunities to develop skills needed for success in any university program. Materials from Canadian history are used to develop skills in areas of critical thinking, research, organization, questions, analysis, creating and proving hypotheses, essay writing and seminar presentation. A focus will also be placed on communication in French.

French Immersion Canadian History 122

Value: 1 credit

*Recommendation: **French Immersion Modern History 111/112***

French Immersion Canadian History 122 is designed to provide opportunities for students to study, discuss and write about the major events in modern Canadian history. Areas of study include pre and post-Confederation Canada; westward expansion, the Canadian identity, immigration, our role in the Boer War and both world wars, and our role in the Cold War. Assessment includes tests, projects, essays and presentations. A focus will also be placed on communication in French.

French Immersion Modern History 111

Value: 1 credit

*Recommendation: A **minimum mark of 80% in FI Ancient & Medieval 10** or teacher recommendation for FIMH 111)*

The course content is the same at the English language Modern History course. However, the objectives are somewhat different. The French Immersion Modern History teacher is not only preoccupied with the knowledge of the course content but also with the development of the students' language skills. The course will cover topics such as the Great Discoveries, the Scientific Revolution, the Age of Enlightenment, the French Revolution, Industrialism, the World Wars, the Holocaust and the Cold War. The students will also learn about personalities who helped shape our world. Immersion students are strongly encouraged to study Modern History in French in order to continue developing language skills. There is also a mark of 10% for participation in French.

French Immersion Modern History 112

Value: 1 credit

*Recommendation: **French Immersion Ancient & Medieval History 10 (French Immersion Social Studies 10**)*

The course content is the same at the English language Modern History course. However, the objectives are somewhat different. The French Immersion Modern History teacher is not only preoccupied with the knowledge of the course content but also with the development of the students' language skills. The course will cover topics such as the Great Discoveries, the Scientific Revolution, the Age of Enlightenment, the French Revolution, Industrialism, the World Wars, the Holocaust and the Cold War. The students will also learn about personalities who helped shape our world. Immersion students are strongly encouraged to study Modern History in French in order to continue developing language skills. The 111 course will be more research based and hopefully work more with primary documents. There is also a mark of 10% for participation in French.

French Immersion World Issues 120

Value: 1 credit

*Recommendation: **FI Modern History 112 or 111***

The general aim of the World Issues 120 program is to provide an understanding of the issues and events that have occurred (post World War II) and continue to shape the modern world. The course covers current political, economic, social and environmental concerns which are global in nature and require global solutions.

Foundations of Mathematics 11

Value: 1 credit

*Recommendations: **Geometry, Measurement and Finance 10 and Number, Relations and Functions 10***

This course is a recommendation for a second Foundations of Mathematics course in Grade 12, providing a pathway designed for entry into academic programs not requiring pre-calculus. It is also a recommendation for the pre-calculus pathway. Students develop spatial sense and proportional reasoning through problems that involve rates, scale diagrams and relationships among similar 2-D and 3-D shapes and objects. Students develop logical reasoning skills and apply this to proofs and problems involving angles and triangles, the sine law and the cosine law. Students model and solve problems involving systems of linear inequality in two variables and explore characteristics of quadratic functions. Costs and benefits of renting and leasing and buying are explored and investment portfolios are analyzed.

Students have a choice of this course or **Financial and Workplace 11** to complete graduation requirements. This is a recommendation for **Foundations of Mathematics 12** and a recommendation or co-requisite for **Pre-Calculus 11**.

Foundations of Mathematics 120

Value: 1 credit

*Recommendation: **Foundations of Mathematics 110** is a recommendation for this course. This course completes the Foundations of Mathematics pathway.*

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.

French Immersion Language Arts 110

Value: 1 credit

*Recommendation: **French Immersion Language Arts 10***

This course is designed to assure the maintenance and progression of the language skills of Early and Late Immersion students. Students taking this course will study two novels and be asked to write essays. New grammar structures and rules will be introduced. The grade 11 student will be encouraged not only to speak French but to speak French correctly in order to prepare for their oral interview in grade 12. Throughout the term students' oral comprehension will be tested with a French Canadian miniseries where students will also be able to explore the French culture in their country.

French *Immersion Language Arts 120*

Value: 1 credit

Recommendation: ***French Immersion Language Arts 110***

This course pursues the same objectives as the 10 and 110 programs. The 120 program will continue to develop the students' vocabulary and writing skills by having them write essays, letters and narratives, as well as other forms of writing and participate in numerous oral activities. It will also cover the series “les Hauts et les Bas de Sophie Paquin” and a novel study. It is hoped that the 120 course will fine-tune the language skills acquired during the previous years of the Immersion program. A provincial assessment of French language proficiency is completed during this course.

G

Graphic Art and Design 110

Value: 1 credit

This course focuses on the making and analyzing of commercial art. Throughout the semester students will be developing art that focus of different design principles found in things like advertising, commercial packaging, company logos and popular culture. Students will have the opportunity to work with both traditional art materials as well as acquiring new digital editing skills and artistic techniques on programs such as gimp or Photoshop.

H

Hospitality and Tourism 110 (formally known as Tourism 110)

Value: 1 credit

The Tourism industry is identified in Canada and particularly New Brunswick, as a rapidly growing industry. This course will provide students with lifelong learning skills that are transferable to future learning and/or the hospitality and tourism industry. The student will acquire career information, skill development and the talents for employment. This course relies on resource based learning, practical experiences, resource people and information that will help the individual in his/her career choice. Topics include the main sectors of the tourism industry, influences on the tourism industry, personal and interpersonal skills regarding career opportunities available, travel industry and marketing strategies.

Housing & Interior Design 120

Value: 1 credit

Housing and Interior Design 120 is designed to show the relationship between different types of housing and the housing needs of individuals, families and communities. The influences of cultural, psychological and aesthetic aspects of housing are examined. The value of creativity and individuality in a living environment is an important element of the course. Course topics span factors including housing in various cultures, historical and modern trends in housing and lifestyles needs, financial and legal costs and requirements, basic floor plans and arrangements, plus the principles and elements of design. This course would be of interest to students interested in the field of housing and interior design.

Human Physiology 110

Value: 1 Credit

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. 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. This course focuses on the physical components and healthy functioning of all the major human body systems and will require students to both independently research and apply this knowledge to their personal life. **This course is not recommended for those enrolling in Biology 11.**

Human Services 110

Value: 1 credit

The overall aim of Human Services is to increase students' awareness of the importance of human service work and to prepare them for future employment and/or post-secondary education. This course also explores supporting families at all stages. Due to the increasing elderly population and the trend towards "*at home care*" versus "*institution care"*, there is a need for trained human service workers. The course will focus on the skills to prepare people to work with youth, elderly and the disabled. It may include community activities.

|

Individual and Family Dynamics 120

Value: 1 credit

The individual and Family Dynamics 120 curriculum explores 4 themes: families in a changing world, personal growth and development, interpersonal relationships, and individual and family wellness.

Information Technology 120

Value: 1 credit

NOTE: Counts toward the FIT Certificate

Information Technology 120 focuses on 3 major learning modules: Windows, Internet Search Techniques and the Microsoft Office Suite (MS Word, MS Excel, MS PowerPoint, and MS Access). Each of the modules will provide the student with a good understanding and introduction to some of the higher level operations of a computer system and to some of the available software applications and functions of the workplace computing environment. This course is designed for career and personal use.

Internal Combustion Engines 110

Value: 1 credit

A course designed to develop proficiency in the repair, overhaul, service and testing of the internal combustion engine. The theory of operation of the engine and its components is emphasized along with the development of manipulative skills and work habits. The students will be working on full size car engines along with the necessary equipment and tools for testing and repair.

Introduction to Accounting 120

Value: 1 credit

Introduction to Accounting 120 is a program which introduces basic accounting principles used in service and merchandising businesses. Case studies and interpretation of financial data are course components. This is an excellent program for students who plan to enter business or business-related programs on the university or community college level, as well as, for anyone who may wish to manage, own or operate a business.

Introduction to Applied Technology 110

Value: 1 credit

This course is for anyone interested in the trades and who wants to learn through practical, hands-on activities. No experience is necessary. The intention of this course is to expose students to various skills that can prove useful for those wanting to become more proficient with hands-on applications in fields including: electrical, carpentry, drafting, workplace safety, and WHMIS. This is a great introduction course for students as it can help them determine their areas of interest and the courses they would like to pursue during their grade 11 and 12 years.

Introduction to Electronics 110

Value: 1 credit

Recommendation: Completion of Science 10

Introduction to Electronics is an excellent course for those students planning to further study the behavior of electricity. The course requires the use of the mathematical application, Ohm's Law, for measuring current, voltage, and resistance in series and parallel circuits. Through written labs and hands-on activities, students will develop a basic knowledge required for wiring low voltage/ low currant devices into circuits. This fulfils the requirement of one science credit. **This course may be used as a science credit.**

Introduction to Environmental Science 120

Value: 1 credit

In the first portion of this course students will explore the basic concepts associated with maintaining the Earth and keeping the world alive. The last portion of the course will involve students performing indepth studies into various environmental problems/topics such as: Tropical Rainforests, Nuclear Energy, Greenhouse Effect and The Ozone Layer.

J

Journalism 120

Value: 1 credit

Recommendation: ***English 112*** *with evidence of a strong inclination towards writing*

This is primarily a writing course with emphasis on communicative skills, principles of journalistic expression and the practice of both. Students will be provided with intensive practice in writing and editing in a style that demands brevity and clarity and is designed for publication. Higher levels of activities such as research, synthesis, analysis and evaluation are an integral part the preparation for final drafts. In addition, it requires students to demonstrate creative processes involving skills such as design, layout, creative writing and photography. Computer technology is also integrated into the curriculum in order to provide students with practical opportunities to use word processing, desktop publishing, painting, drawing, accounting and database programs. This course will also explore the field of journalism as it applies to radio, TV, blogging, multi-media, and emerging technologies. Students will take this course over a semester and thus receive one credit.

L

Law 120

Value: 1 credit

This course covers all aspects of law-a brief history of our system, criminal law, human rights, charter of Rights and Freedoms, the Youth Criminal Justice Act and aspects of civil law. This course should be of interest to all students as we are all aware of the maxim “Ignorance of the law is no excuse.”

M

Media Studies 120

Value: 1 credit

The goal of the Media Studies 120 course is to offer an introduction to the evolution and impact of mass media on the individual and society. The course will emphasize the content, processes and technical elements of media production. This is primarily a project-based course, so the student must be prepared to submit work in accordance with predetermined deadlines. Completion of all assignments promptly and satisfactorily is necessary for success in this course.

Metal Fabrication 110

Value: 1 credit

This 90 hour course introduces students to the trade of Welding. Students enrolled in this competency based course will learn how to weld, but and join metal. Skills such as measuring, layout and fabrication will give students a jump start in a welding career. If your goal is to become a welder or if you just want to be able to work in your shop at home, this course is for you. Students are encouraged to purchase a welding helmet and gloves. Students need to provide safety footwear.

Milling and Cabinet Work 120

Value: 1 credit

A laboratory course which emphasizes the construction of custom mill items and cabinets found in the typical home. Students practice estimating and planning of projects as well as the maintenance of hand and machine tools. **There will be a lab fee of $15.**

Modern History 111

Value: 1 credit

*Recommendation: **Ancient & Medieval History 10** with a minimum mark of 80% or teacher recommendations.*

Modern History 111 is a course for students who intend to go to college or university after high school graduation. Units of study include The End of Traditional European Society, the French Revolution, the Industrial Revolution, World War I, the 1920's and 1930's, World War II and the Holocaust, and the Cold War. Assessment includes tests, essays, response papers, projects and presentations. The **Level 1** will be more research based and hopefully work more with primary documents. This will help the student work directly with primary documents and help the student work independently.

Modern History 112

Value: 1 credit

*Recommendation: **Ancient & Medieval History 10** (Social Studies 10)*

Modern History 112 is a course for students who intend to go to college or university after high school graduation. Units of study include The End of Traditional European Society, the French Revolution, the Industrial Revolution, World War I, the 1920's and 1930's, World War II and the Holocaust, and the Cold War. Assessment includes tests, essays, response papers, projects and presentations.

Modern History 113

Value: 1 credit

*Recommendation: **Ancient & Medieval History 10** (Social Studies 10)*

Modern History 113 is a course designed for students who do not intend to go to university, but may wish to attend some colleges. The major topic areas covered in this course are The Growth of Industrialization, World War I, Life in the 1920's and 30's, the rise of Communism and Nazism, and World War II. A special unit on the Holocaust is offered with the units on Nazism and World War II.

Music 112/113

Value: 1 credit

Recommendation: Successful completion of Music 10

This is a general appreciation course. Emphasis will be placed on the development of practical skills in piano/ guitar/ voice / non-melodic and melodic percussion. This is an activity-based course so students must be mature enough to meet the high level of independence and responsibility required of them. Students will be exposed to a variety of styles through theory and history exercises.

Music 122

Value: I credit

Recommendation: ***Music 112***

This course is designed for the advanced and serious study of music for those planning to continue in music after graduation. Students will work independently on topics such as Canadian Music History, Music Criticism, Music Industry/Careers and Composition. There is also a practical component to the course.

N

Nutrition for Healthy Living 120

Value: 1 credit

Through research, the science of Nutrition and Healthy Living continues to expand. It is important to understand information provided and to make smart, healthy decisions. This course 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. 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. There will also be a practical physical component to the course, including fitness and other activities.

O

Outdoor Pursuits 110

Value: 1 credit

The course will develop personal outdoor recreation skills based on environmental ethics. Students must complete a series of out-trips that may take more than one period, including a couple of overnight camping trips. The course will take advantage of our local resources and will include camping, hiking, canoeing and other outdoor adventure activities. Students must be prepared to go outside in a variety of weather conditions. Students will be responsible to plan, lead, and evaluate out-trip experiences. Students must have a teacher complete a student evaluation screening form prior to admission in the course. These forms will be in the office at course selection time. **A $125 fee will be charged for this course upon acceptance.** This pays for our trip to NS to go Tidal Bore Rafting as well as other consumables throughout the year.

P

Physical Education Leadership 120

Value: 1 credit

This course is an elective one for students with special interest in physical activities and healthful living, combined with a desire to develop leadership skills which will enable them to help in the community. Students are required to apply for admission to the course, and applications are screened by the Physical Education staff and the Guidance staff of the school. This course consists of units in management of athletic events, teaching, coaching, officiating, sports in contemporary society and selected health topics. As a member of the PE 120 Leadership Class, each student will be expected to achieve 20 leadership hours that make our school or our community a better place. Each student must pass this part of the course (at least 12 volunteer hours) or the course will be incomplete. 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.

Physical Geography 110

Value: 1 credit

Recommendation: ***Geometry, Measurement and Finance 10***

The course is a combination of social/physical sciences. The main emphasis of Physical Geography is the study of the planet earth and the processes, forces, systems and components that exist with it. Topics that are covered include Earth and space, map and atlas work, climate, atmosphere, meteorology, geology and earth's composition.

Physics 111

Value: 1 credit

Recommendation: ***Geometry, Measurement and Finance 10, Numbers, Relations and Functions 10, Science 10*** *(with a suggested mark of 80% or above) and* ***Foundations of Math 110*** *(pre-/co-requisite).*

This enriched course includes the same topics as Physics 112 but topics will be explored at a great depth and a greater pace. This course requires students to increase their depth of understanding and increase their investigative skills rather than just increasing their factual knowledge. This course is intended for students with a special interest in Physics and a commitment to independent work.

Physics 112

Value: 1 credit

Recommendation: ***Geometry, Measurement and Finance 10****,* ***Numbers, Relations and Functions 10****,* ***Science 10*** *(with a suggested mark of 70% or above) and* ***Foundations of Math 110*** *(pre-/co-requisite).*

Physics is the study of matter and energy and their relationship. Physics 112 is an introductory course that looks at motion, forces, energy, work, power, and wave motion. It is expected the students should have a good working understanding of math topics and skills introduced in grade 10 math.

Physics 121

Value: 1 credit

Recommendation: ***Foundations of Math 110*** *and* ***Physics 111/112*** *(with a suggested mark of 80% and above).*

This enriched course includes the same topics as Physics 122, but topics will be explored at a great depth and a greater pace. This course requires students to increase their depth of understanding and increase their investigative skills rather than just increasing their factual knowledge. This course will require a class presentation and is intended for students with a strong interest in pursuing Physics or engineering in post-secondary.

Physics 122

Value: 1 credit

Recommendation: ***Physics 112*** *and* ***Foundations of Math 11*** *(with a suggested mark of 70% and above).*

This course builds upon the content covered in Physics 112. Topics covered are electrostatics, current electricity, and application of forces in two dimensions, energy and momentum, projectile motion and centripetal motion. A strong understanding of Foundations of Math 110, especially trigonometry, algebra and quadratics is required.

Political Science 120

Value: 1 credit

The main emphasis of this program will be the Canadian political system. Also included will be a study of the American government in comparison to the Canadian. The second part of the course will deal with the "isms" of the 19th and 20th centuries. Particular emphasis will be placed on Communism and Nazism and their developments in Russia and Germany respectively. When elections are called, special attention will be given to the study of political issues, parties and candidates.

Post-Intensive French 11 (11 PIF)

Value: 1 credit

*Recommendation: Appropriate level of oral proficiency at the end of **PIF 10** (as determined by the PIF 10 teacher).*

Students will continue to be challenged, with a focus on the following French second language skills: **oral** (spoken production, spoken interaction, listening), **reading** (comprehension, fluency, accuracy, responding to reading), and **writing** (modeled, independent, genres, conventions, accuracy, and fluency). An **exit project**, containing oral, reading and writing components is mandatory for each student completing PIF 11.

Post-Intensive French 12 (12 PIF)

Value: 1 credit

*Recommendation: **PIF 11***

Students will continue to be challenged, with a focus on the following French second language skills: **oral** (spoken production, spoken interaction, listening), **reading** (comprehension, fluency, accuracy, responding to reading), and **writing** (modeled, independent, genres, conventions, accuracy, and fluency). A provincial assessment of French language proficiency is completed during this course.

Power Train and Chassis 110

Value: 1 credit

The course is designed to develop proficiency in the service and maintenance of the automobile chassis and power train. Emphasis is placed on function, repair, and replacement of components which include spring and shock assemblies, brakes, steering, wheel bearings, tires, transmissions, differentials and drive lines. The student will have the opportunity to work on automobiles with tools and equipment presently used in the trade.

Pre-Calculus 11

Value: 1 credit

*Recommendation or Co-requisite: **Foundations of Mathematics 11***

This course, followed by later courses in Pre-Calculus and Calculus is designed for entry into post-secondary programs requiring Pre-Calculus. Students demonstrate an understanding of absolute value of real numbers, and solve problems that involve radicals, radical expressions, and radical equations. Students determine equivalent forms, simplify rational expressions, and solve problems that involve rational equations. They develop an understanding of angles in standard position ($0°\text{to}360°$) and solve problems for these angles using the three primary trigonometric ratios. Polynomial expressions are factored and absolute value functions and quadratic functions are analyzed and graphed. Students solve problems that involve quadratic equations and solve, algebraically and graphically, problems that involve systems of linear-quadratic and quadratic-quadratic equations in two variables. They also solve problems that involve linear and quadratic inequalities in two variables, and quadratic inequalities in one variable.

This course is a recommendation for **Pre-Calculus 12A**.

Pre-Calculus A 120

Value: 1 credit

Recommendation: ***Pre-Calculus 11***

This course follows **Pre-Calculus 110** and precedes **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, graphing and analyzing radical 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

Value: I credit

Recommendation: ***Pre-Calculus A 120***

This course follows **Pre-Calculus A120** and precedes **Calculus 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. 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.

Psychology 120 *(Local Option Course)*

Value: 1 credit

Recommendation: **Biology 111/112 and English 111/112**

This course is an introduction to psychology and is designed for students who are interested in pursuing a career in psychology, or for anyone interested in learning more about human nature. Students in their exploration of psychology will attempt to answer questions about the general nature of human behavior including how we think, feel and act. The field of psychology requires students to think critically as they explore the various aspect of human nature such as pain

perception, hunger regulation, causes of aggression, abnormal behavior and so forth. ***NOTE: This course may not be used as a Science credit toward graduation.***

R

Reading Tutor 120

Value: 1 credit

Reading Tutor 120 pairs senior students with younger struggling readers. The tutor will be responsible for selecting the reading materials and planning and implementing daily activities with their readers. Tutors will acquire valuable reading, writing and tutoring skills while also developing useful interpersonal, organizational, planning and problem solving skills.

Residential Finish and Insulation 120

Value: 1 credit

Recommendation: Framing and Sheathing 110

A course designed to acquaint the student with the knowledge and skills necessary to complete the interior and exterior of a building. Insulation, wall and ceiling cladding and the installation of interior doors and trim are covered through "hands on" experience. Exterior wall cladding, window and door frames as well as cornice trim and roof coverings are included. **There will be a lab fee of $15.**

Robotics and Automated Technology 120

Value: 1 credit

Recommendation: Science 10

This course is designed to acquaint the student with the knowledge and skills necessary to pursue further studies in the Robotics field. Robot technology will be explored including hands on construction and programming of robot devices. Students will work to create robot-operated systems that reflect those used in industry. Participation in an annual robotics competition and robotics club may be part of the course outcomes. Also, as part of the course students will be working with pneumatic devices such as door openers. Students will create actual schematic diagrams as well as build and construct the components on blue pneumatic boards. **Note: this course may be used as a science credit.**

T

Technical Support 110

Value: 1 credit

NOTE: Counts toward FIT Certificate

The Tech Support 110 course is an in depth exposure in computer hardware and operating systems. Students will learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands on activities and labs, students will learn how to disassemble and assemble computers, configure a computer, install operating systems and software also trouble shoot hardware and software problems. In addition, there will be instruction on networking and communication skills as well. This course can be used as a dual credit. Which means the course can be used as a high school credit towards graduation as well as a Community College credit. This course will help students prepare for CompTIA's A+ certification. The course is mostly on-line provided through Cisco Systems Networking Academy as well as hands on in the lab. This course is also (1) of the 5 courses required to successful complete the **FIT (Focus in Technology) certificate**.

Theatre Arts 120

Value: 1 credit

NOTE: Open to Grade 11 and 12 Students

This course is based on the theory that students should explore all facets of the performing art identified as theatre. Students will read and interpret scripted drama, learn how to analyze scripted drama, and learn how to stage and perform scripted and improvised drama. Students of Theatre Arts 120 will be encouraged to use their imaginations, sharpen their senses, and polish their awareness of the written and spoken word.

This course aims to capitalize on the individuality, confidence, creativity, and communication ability of the students.

Assessments include content-based quizzes and tests in addition to a minimum of three formal stage performances including but not limited to: a monologue, a short multi-person scene and the staging of a one-act play.

Tune-up and Emissions 120

Value: 1 credit

Recommendation or Co-requisite: ***Internal Combustion Engines*** *and* ***Automotive Electrical Systems 120***

This course is designed to provide students with a practical approach to diagnosing, servicing, and repairing automotive fuel and emission systems, and performing engine tune-up.

V

Visual Arts 110

Value: 1 credit

Recommendation: Art 10

The Art 110 course begins with a basic drawing unit followed by projects exploring different media such as painting, sculpture, and print making. Artists who have made a significant contribution to the history of art will be presented. Evaluation will be based on all assigned art projects, a sketchbook, a final auto-biographical self-portrait project, and a written exam. **Students will be expected to supply basic art materials**.

Visual Arts 120

Value: 1 credit

Recommendation: ***Visual Arts 110***

Visual Arts 120 is intended for more serious art students who have successfully completed Visual Arts 110. Drawing, painting, sculpture, pottery, and printmaking will be studied as well as art history and art appreciation. A percentage of the final evaluation will be based on an independent studio unit as well as a written exam. **Students will be expected to supply basic art materials and a sketchbook.**

W

Wellness through Physical Education 110

Value: 1 credit

The goal of this course 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.

Women, Media, and Culture 120

Value: 1 credit

Recommendation: ***English 112/111***

Women, Media, and Culture 120 aims to introduce students to critical literacy practices by examining cultural constructions (in particular, 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 in an effort 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.

World Issues 120

Value: 1 credit

Recommendation: ***Modern History 112 or 111***

The general aim of the World Issues 120 program is to provide an understanding of the issues and events that have occurred (post World War II) and continue to shape the modern world. The course covers current political, economic, social and environmental concerns which are global in nature and require global solutions.

Writing 110

Value: 1 credit

Recommendation: ***English 10*** *with evidence of a strong inclination towards writing*

The Writing 110 curriculum provides experiences in which students become acquainted with the essential elements of the writing process. They will further develop an understanding of the conventions of written language and the appropriateness of their use. Students will use personal, expository and creative writing and will also develop an awareness of the variety of personal approaches used in the writing process. Opportunity is given to write for reasons stemming from the student's own interests and needs. In addition, students will write subjectively and objectively, using different points of view.