# SUSSEX REGIONAL

# HIGH SCHOOL

## COURSE REQUEST HANDBOOK

## 2022-2023

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# General Comments

## Course Requests

Students are encouraged to request courses under the advisement of both parents and teachers. It is important to make wise choices when requesting remembering that the number of classes in each subject depends on the number of students requesting 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 without an assigned level. (Some "0" levels meet the requirements for post-secondary entrance)

**LEVEL 1** - Enriched courses designed for students with an exceptional talent and interest in the subject.

**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.

# New Brunswick High School Graduation Requirements

- **Minimum of 18 credits which include the following 8 compulsory courses:**

  - ✓ English grade 11 Literary Texts and Informational Texts **(2 courses, 2 credits total)**
  - ✓ English grade 12 **(1 credit)**
  - ✓ 2 credited math courses **(2 credits)**
  - ✓ Modern History grade 11 **(1 credit)**
  - ✓ Science **(1 credit)** from:
    - Automotive Electrical Systems 120
    - Biology 11
    - Chemistry 11
    - Human Physiology 110
    - Introduction to Environmental Science 120
    - Physics 11
    - Robotics and Automated Technology 120

  - ✓ Fine Arts/Life Role Development **(1 credit)** from:
    - Automotive Electrical Systems 120
    - Cooperative Education 120
    - Culinary Technology 110
    - Culinary Technology 120
    - Dramatic Arts 110/120
    - Electrical Wiring 110/120
    - Entrepreneurship 110
    - Framing and Sheathing 110
    - Goals, Growth & Grit 120
    - Graphic Art & Design 110
    - Housing and Interior Design 120
    - Individual and Family Dynamics 120
    - Internal Combustion Engines 110
    - Introduction to Applied Tech 110
    - Metals Fabrication 110/120
    - Mill and Cabinet Work 120
    - Music 11/12
    - Nutrition and Healthy Living 120
    - Outdoor Education 110
    - Physical Education Leadership 120
    - Power Train and Chassis 110
    - Residential Finish 120
    - Tune-up and Emissions 120
    - Visual Arts 110/120
    - Wellness through Physical Education 110

- Students must have an English 12 and a minimum of four other grade 12 credits.
- 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 who are unsuccessful in grade 9, will have the opportunity to rewrite in their grade 11 and 12 year. Candidates are provided further support in grade 10.

| Graduation Years: Grade 11 and 12 Courses | |
|---|---|
| **English** | **Fine Arts** |
| ○ Dramatic Arts 110<br>○ Dramatic Arts 120<br>○ English LA Literary Texts 111/112/113<br>○ English LA Informational Texts 111/112/113<br>○ English Language Arts 121/122/123<br>○ Goals, Growth and Grit 120<br>○ Media Studies 120<br>○ Writing 110 | ○ Graphic Art & Design 110<br>○ Music 112<br>○ Music 122<br>○ Visual Arts 110<br>○ Visual Arts 120 |
| | **Languages** |
| | ○ Post Intensive French 110<br>○ Post Intensive French 120 |
| **Science** | **French Immersion** |
| ○ Automotive Electrical Systems 120<br>○ Biology 111 or Biology 112<br>○ Biology 121 or Biology 122<br>○ Chemistry 111 or Chemistry 112<br>○ Chemistry 121 or Chemistry 122<br>○ FI Biology 112<br>○ Human Physiology 110<br>○ Intro to Environmental Science 120<br>○ Physics 111 or 112<br>○ Physics 121 or 122 | ○ FI Biology 112<br>○ FI Canadian History 121 or 122<br>○ FI Language Arts 110<br>○ FI Language Arts 120<br>○ FI Modern History 111/112<br>○ FI World Issues 120 |
| | **Local Options** |
| | ○ Agricultural Science 120<br>○ Automotive Exploration 120<br>○ Psychology 120 |
| **Social Studies** | **Mathematics** |
| ○ Canadian History 122<br>○ Child Studies 120<br>○ Individual & Family Dynamics 120<br>○ Law 120<br>○ Modern History 112/113<br>○ World Issues 120 | ○ Calculus 120<br>○ Financial & Workplace Math 110<br>○ Financial & Workplace Math 120<br>○ Foundations of Math 110<br>○ Foundations of Math 120<br>○ NBCC Math for Trades 120<br>○ Pre-Calculus 110<br>○ Pre-Calculus A 120<br>○ Pre-Calculus B 120 |
| **Carpentry** | |
| ○ Framing and Sheathing 110<br>○ Mill and Cabinet Work 120<br>○ Residential Finish 120 | |
| **Physical Education** | **Business** |
| ○ Human Services 110<br>○ Nutrition and Healthy Living 120<br>○ Outdoor Education 110<br>○ Physical Education Leadership 120<br>○ Wellness Physical Education 110 | ○ Business Org & Man 120<br>○ Economics 120<br>○ Entrepreneurship 110<br>○ Hospitality & Tourism 110<br>○ Introduction to Accounting 120 |
| **ICT (Information & Communication Technology)** | **Skilled Trades & Work Related** |
| ○ Advanced Technology 120<br>○ Comp-Aided Design 110<br>○ Computer Science 110<br>○ Computer Science 120<br>○ Cybersecurity & Technical Support 110<br>○ Digital Productions 120<br>○ Information Technology 120<br>○ Robotics & Automated Technology 120 | ○ COOP 120 (2 credits)<br>○ Culinary Technology 110<br>○ Culinary Technology 120<br>○ Early Childhood Services 110<br>○ Housing and Interior Design 120<br>○ Introduction to Applied Technology 110 |
| **Welding & Wiring** | **Automotive** |
| ○ Electrical Wiring 110<br>○ Electrical Wiring 120<br>○ Metals Fabrication 110<br>○ Metals Fabrication 120 | ○ Automotive Electrical Systems 120<br>○ Automotive Exploration 120<br>○ Internal Combustion Engines 110<br>○ Power Train and Chassis 110<br>○ Tune-up and Emissions 120 |

# French Immersion Course Requirements for a Certificate of Second Language Proficiency

In Grades 9 and 10, 50% of courses are offered in French.

In order to develop a strong foundation and confidence in French, **students must select a total of at least 5 French courses in** Grades 11 and 12. French Immersion Language Arts 11 & 12 and French Immersion Modern History 11 are compulsory.

To ensure a strong program for all schools, the Department of Education and Early Childhood Development has committed to expanding the online offerings of French high school courses. The following online courses are now offered:

- FSL Law
- FSL Environmental Science
- FSL Writing
- FSL Tourism
- FSL Co-op and Virtual Co-op Education

Students' oral proficiency is tested at the end of Grade 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 (Cybersecurity & Technical Support 110)
- Interactive Media (Digital Production 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

# HIGH SCHOOL MATHEMATICS PATHWAYS

## GRADE 10

### Geometry, Measurement and Finance 10 EN/FR

**Length:** One semester

**Prerequisite:** *Mathematics 9*

**Topics:** Pythagorean Theorem; polygons; angles; trigonometric ratios; metric and imperial systems of measurement; surface area and volume; unit pricing; currency exchange; income (gross and net pay); credit cards; loans; and interest

### Number, Relations and Functions 10 EN/FR

**Length:** One semester

**Prerequisite:** *Mathematics 9*

**Topics:** prime factors; common factors; square and cube roots; irrational numbers; integral and rational exponents; polynomial expressions; trinomial factoring; linear relations and functions; slope; distance formula; and midpoint formula

## FINANCIAL AND WORKPLACE MATHEMATICS

This pathway is organized for students who plan to take post-secondary programs that require applied mathematics or who plan to enter the workforce directly after high school.

## FOUNDATIONS OF MATHEMATICS

This pathway is organized for students who plan to take post-secondary academic programs that do not require calculus.

## PRE-CALCULUS

This pathway is organized for students who plan to take post-secondary programs that require calculus.

## GRADE 11

### Financial and Workplace Mathematics 110 EN/FR

**Length:** One semester

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

**Topics:** right triangles; trigonometry; scale models and drawings; numerical reasoning; renting and buying; investment portfolios; personal budgets; application of formulas; slope; and proportional reasoning

### Foundations of Mathematics 110 EN/FR

**Length:** One semester

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

**Topics:** numerical and logical reasoning; angles and triangles; sine and cosine laws; systems of linear inequalities; quadratic functions; renting and buying; and investment portfolios

### Pre-Calculus 110 EN/FR

**Length:** One semester

**Pre or Co-requisite:** *Foundations of Mathematics 110*

**Topics:** absolute value functions; radical expressions and equations; rational expressions and equations; angles and trigonometric ratios (0°–360°); polynomial factoring; systems of equations; quadratic functions and equations; and linear and quadratic inequalities

## GRADE 12

### Financial and Workplace Mathematics 120

**Length:** One semester

**Prerequisites:** *Financial and Workplace Mathematics 110* **or** *Foundations of Mathematics 110*

**Topics:** measuring; sine and cosine laws; properties of polygons; transformations of 2-D and 3-D shapes; small business finance; linear relationships; data interpretation; and probability

### Foundations of Mathematics 120

**Length:** One semester

**Prerequisite:** *Foundations of Mathematics 110*

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

### Pre-Calculus A 120 EN/FR

**Length:** One semester

**Prerequisite:** *Pre-Calculus 110*

**Topics:** graphs of functions and related equations; inverse, radical, exponential and logarithmic functions; angles in standard position in degrees and radians; unit circle; trigonometric ratios and sine, cosine and tangent equations to solve problems; and trigonometric identities

**Note:** Most post-secondary programs that require Pre-Calculus A 120 also require Pre-Calculus B 120

### NBCC Skilled Trades and Work Ready 120

**Length:** One semester

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

**Topics (in a skilled trade and/or work-ready context):** whole numbers; fractions; decimals; percent; ratio and proportion, integers; scientific notation; metric system; and measurement

**Note:** This course is intended for learners entering an NBCC program in the next academic year. Any remaining seats may be filled at the school's discretion.

### Pre-Calculus B 120

**Length:** One semester

**Pre or Co-requisite:** *Pre-Calculus A 120*

**Topics:** arithmetic and geometric sequences and series; polynomial factoring and functions; reciprocal and rational functions; function toolkit permutations; combinations and binomial theorem; and limits and continuity of functions

### Calculus 120

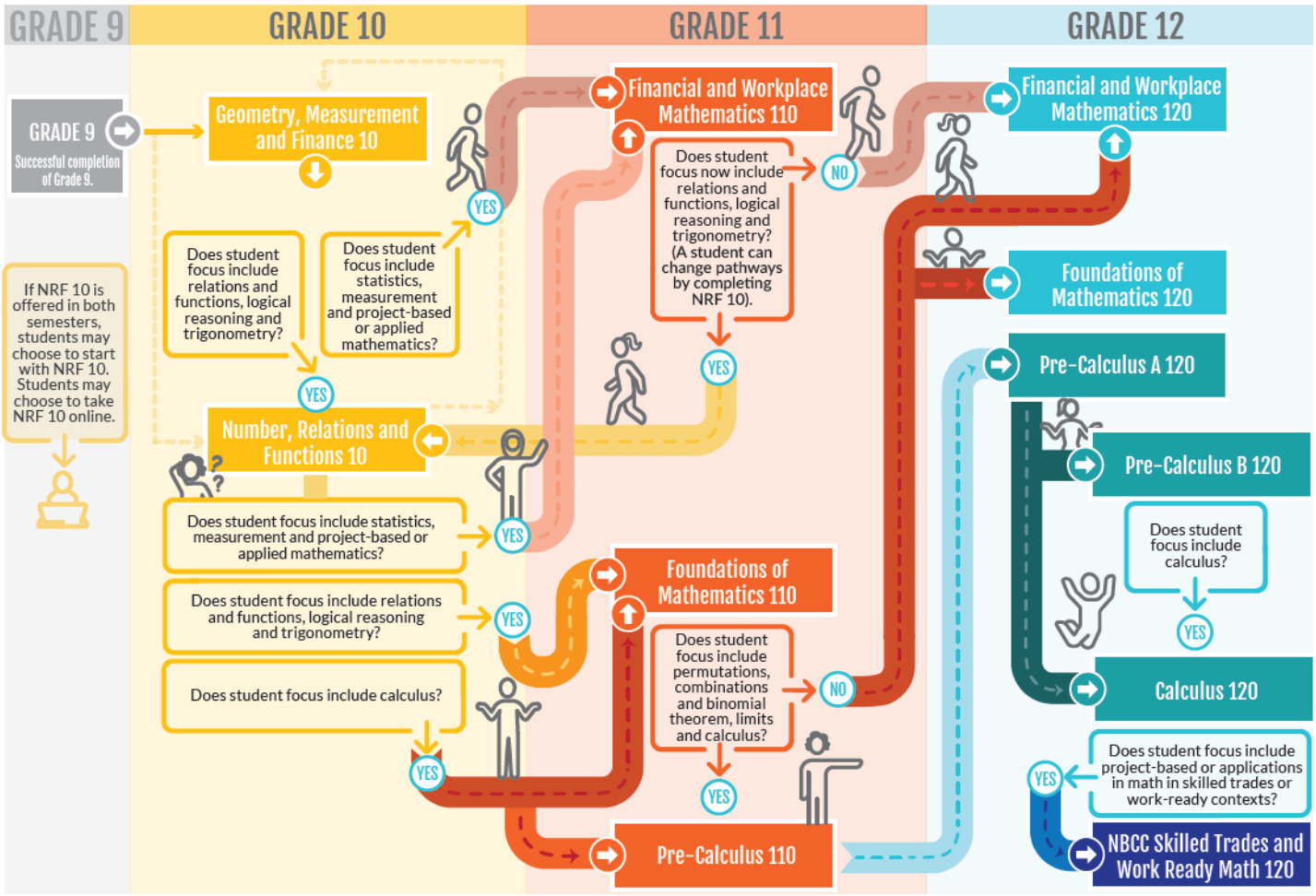
**Length:** One semester

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

**Topics:** graphs of functions and related equations; inverse, radical, exponential and logarithmic functions; angles in standard position in degrees and radians; unit circle; trigonometric ratios and sine, cosine and tangent equations to solve problems; and trigonometric identities

EN/FR = ENGLISH/FRENCH  Available online

# HIGH SCHOOL MATHEMATICS PATHWAYS




## Are pathways different from levels?

Levelled courses are developed for different academic abilities. Pathways are organizations of courses that are conceptually similar and work towards specific student interests or needs after high school. Pathways are not sorted by difficulty/academic ability.

## If a student changes their graduation plans, can they switch mathematics pathways?

Students may enrol in any high school mathematics course provided the specific prerequisites are completed. *Number, Relations, and Functions 10* and all other Grade 11 and Grade 12 mathematics courses, provide credits towards graduation. Credits towards graduation may be acquired from face-to-face or online courses. For example, students looking to complete *Number, Relations and Functions 10* in a later academic year may complete the online version hosted on the NBVLC.

## Do I have to complete all the courses on a specific mathematics pathway to graduate?

No. Courses used for credit do not have to be on the same pathway provided the student meets prerequisite requirements. However, students may need specific courses for entrance to post-secondary programs. Please verify with a high school guidance/career counsellor and with the institution's entrance requirements.

## Should students take more math courses even if they don't need them to graduate?

Students may need specific courses for entrance to post-secondary programs. Taking additional mathematics courses offers continued acquisition of mathematics skills and funds of knowledge, and strengthens mathematical literacy and New Brunswick Global Competencies. Further mathematics connections and understandings may be made by working with mathematics in different contexts.

**For high school graduation, New Brunswick students will successfully complete:**

9/10 Program common curriculum:
Mathematics 9 (Grade 9); and
Geometry, Measurement and Finance 10 (Grade 10).

**Plus acquire two additional math credits which can include:**

Number, Relations and Functions 10 (Grade 10);
Financial and Workplace Mathematics 110; and
Foundations of Mathematics 110.

**MyBluePrint:**

Anglophone East
Anglophone North
Anglophone West
Anglophone South

# 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.

### 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), 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. There will be a lab fee of $10.

## *Biology 112*

*Value: 1 credit*

*Recommendations:* ***Science 10*** *(with a mark of 70% or greater), 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. There will be a lab fee of $10.

## *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. There will be a lab fee of $10.

## *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. There will be a lab fee of $10.

## *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

Prerequisite: ***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 History 122*

*Value: 1 credit*

Prerequisite*:* ***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.

## *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.***
**Entrance to the course will be by means of an application and interview process.**

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

## *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*

Prerequisite*:* ***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*

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**.

# D

## *Digital Production 120*

*Value: 1 credit*

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. This course is also (1) of the 5 courses required to successful complete the **FIT (Focus in Technology) certificate**.

## *Dramatic Arts 110*

*Value: 1 credit*

Dramatic Arts 110 Dramatic Arts 110 is an introductory course designed for any student interested in developing skills related to creativity, performance, and production. This course is highly participatory and requires consistent attendance to facilitate the development of collaborative projects and student engagement in new experiences.

## *Dramatic Arts 120*

*Value: 1 credit*

Prerequisite*:* ***Dramatic Arts 110***

Dramatic Arts 120 is a course that assumes an enhanced level of theatrical experience. Successful completion of Dramatic Arts 110 is highly encouraged, but not required. In collaboration with their teacher and peers, students are encouraged to direct their learning and decide how to demonstrate the acquisition of skills. Students will collect evidence of learning and expand upon the skills acquired in Dramatic Arts 110.

# 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.

## *Electrical Wiring 120*

*Value: 1 credit*

Prerequisite*:* ***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.

## *English Language Arts: Informational Texts 111/112/113*

*Value: 1 Credit*

*Prerequisite(s): English Language Arts 10*

In English language arts, students participate in the study, and appreciation of language, literature, media, and communication. The English Language Arts Informational Texts course develops skills in speaking, listening, reading, viewing, writing, and representing through an in-depth study and creation of information texts.

## *English Language Arts - Literary Texts 111/112/113*

*Value: 1 Credit*

*Prerequisite(s): English Language Arts 10.*

In English language arts, students participate in the study, and appreciation of language, literature, media, and communication. The English Language Arts Literary Texts course develops skills in speaking, listening, reading, viewing, writing, and representing through an in-depth study and creation of literary texts.

## *English 121*

*Value: 1 credit*

*Recommendation:* ***English Informational Texts and English Literary Texts 111/112****, Minimum of 80% or recommendation from Grade 11 ELA 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*

Prerequisite*:* ***English Informational Texts and English Literary Texts 111/112***

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*

Prerequisite*: **English Informational Texts and English Literary Texts 111/112/113***

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*

Prerequisite*: **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.

## *Financial and Workplace Mathematics 120*

*Value: 1 credit*

Prerequisite*:* ***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.

## *Foundations of Mathematics 11*

*Value: 1 credit*

Prerequisite*:* ***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*

Prerequisite*:* ***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.

## *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 Biology 112*

*Value: 1 credit*

Recommendations: **Science 10** (with a mark of 70% or greater), 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.

## *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*

Prerequisite*:* ***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 Language Arts 110*

*Value: 1 credit*

Prerequisite*:* ***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 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*

Prerequisite*:* ***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.

## *French Immersion Modern History 111*

*Value: 1 credit*

*Recommendation: A* ***minimum mark of 80% in FI Social Studies 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*

Prerequisite*:* ***Social Studies 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 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*

Prerequisite*:* ***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.

## 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*

*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.

## I

## *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***

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. *NOTE: Counts toward the FIT Certificate*

## *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 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.

# 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.

## *Metals Fabrication 120*

*Value: 1 credit*

Prerequisite*:* ***Metals Fabrication 110***

This course will be an extension of Metal Fabrication 110 including cutting, grinding, and welding as the focus. Students will continue welding in the flat position and move to horizontal, vertical, and overhead positions. Students will have the opportunity to receive welding tickets.

## *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 112*

*Value: 1 credit*

Prerequisite*:* ***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*

Prerequisite*:* ***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*

Prerequisite*:* ***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*

Prerequisite*:* ***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

## *NBCC Skilled Trades and Work Ready Math 120*

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

NBCC Skilled Trades and Work-Ready Math 120 gives students the opportunity to practice skills individually, to solve problems with others and to work on projects that incorporate mathematics. Ideally, students will apply math concepts using a hands-on fashion in an authentic workplace or trades facility. However, safety restrictions and limitations of facilities in some schools require the flexibility to design activities that can also be completed in a community or classroom environment. Teachers should use a variety of learning situations that will address various learning styles of students and complement the resources available in the school and community.

## *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 Education 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 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.

**Entrance to the course will be by means of an application. Forms are in the office.**

# 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.

## *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.

## *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*

Prerequisite*:* ***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 110*

*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*

Prerequisite*:* ***Pre-Calculus 110***

This course follows **Pre-Calculus 110** and is a co-requisite for **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*

Prerequisite*:* ***Pre-Calculus 110***

This course is a co-requisite of **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

## *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

## *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*

Prerequisite*:* ***Visual 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*

Prerequisite*:* ***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.

## *World Issues 120*

*Value: 1 credit*

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*

Prerequisite*:* ***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.

# Online Courses

**NBVLC Distance Learning Program**

The distance learning program offers 50 high school courses at the grade 11 and 12 level. Students take courses as part of their regular schedule, from the school, under the supervision of a local facilitator. Students work with the online teacher to explore content, complete assignments and learn in an online environment.

**Who takes online courses?**

Online courses are taken by students for all kinds of reasons, including:

- Personal interest and choice
- Additional selection of courses – offered throughout the day
- Courses aren't offered locally when you need them
- Need for more time or extra support to complete a program
- Students wanting to experience online learning before university and post-secondary

**What does it take to succeed in an online course?**

Students taking online courses should have an interested in the course they're taking and have a desire to succeed. Students work at their own pace, but it's important to be persistent, with a willingness to work through problems. Time management is a big part of online learning, and there are checklists and supports built-in to help. Students should be willing to reach out to the online teacher and local facilitator when there are questions and possess, or be willing to develop, some basic technology skills. Considering online learning is in all post-secondary instructions and many workplaces, this is a great opportunity to develop these skills and mindsets.

# Personal Interest Courses

Personal Interest Course Description Personal Interest 1 and 2 courses promote learner agency and support personalized learning. They are designated to provide students with the time, opportunity, and resources to develop and pursue individual interests. The programming for these courses will be designed by the student with the support of their teachers and/or other mentors in the school or community (local/global). Examples include: a Capstone Project (local or community action), an in depth study in a specific problem, the study of and support to the Calls to Action in the Truth and Reconciliation Recommendations, development of a relevant skill set or methodology such as project management, time to pursue a life skill such as financial literacy or an additional language, or to perfect a particular gift or talent that increase personal well-being. Assessment for the completion of this course will be outlined as part of the course design and will be based on the "I" statements for the global competencies. The second section of this course may be an extension to or deepening of the learning in the first course, or it may be an entirely different course. Resources for this course will be accessed through the school, the community or through grants and accessing these resources will be part of the learning process. Students must follow safety guidelines and review and follow policies related to their projects. (Prescribed Codes: DEMLB1100, DEMLB1200 available February 2020).

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

# 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 Education 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 Education 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 Education 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.