



# **Nackawic High School**

## **Course Registration Guide**

**Grades 11 and 12**

**2022-2023**

**A community of engaged learners,  
preparing to meet tomorrow's challenges**

Guide also available at [www.nhs.nbed.nb.ca](http://www.nhs.nbed.nb.ca)

# Nackawic High School

## Introduction

This guide is for students entering grades 11 and/or 12 and is designed to help you choose courses that will meet the New Brunswick High School Graduation requirements.

Homeroom teachers and guidance counselors will provide you with direction and information, and counsellors will assist you with the course planning and selection process. Students should take every opportunity to discuss course options and post-secondary learning and career plans with their parents, guardians, teachers, and guidance counselors. We are here to help you, but ***it is ultimately up to the student and his/her/their parents or guardians to ensure courses are selected to meet post-secondary entrance requirements.***

## General Information

### Personalized Learning Educational Plan

Students who require an Adjusted Curriculum or Individual Personal Learning Plan (PLP) are eligible to have course content adjusted to meet their learning needs. The student's course selections should be done in consultation with the Resource Teacher, Guidance Counselors and Parents.

### Course Levels

All courses have a name and number. The first two digits indicate grade, and the third digit indicates the level.

**Open or "0" courses** are offered to all at one level only.

ex: Tourism 110

**Level 2 courses** are academic/university/college preparatory.

ex: Biology 122

**Level 3 courses** are general/college preparatory.

ex: Modern History 113

**Many electives are open to both grades 11 and 12; read descriptions and pre-requisites carefully.**

### Prerequisites

Many courses have required or recommended prerequisites or co-requisites. Please read the course descriptions carefully prior to course selection. Students without the required prerequisites will not be allowed to enroll in the course.

**Prerequisite:** A course that must have been successfully completed prior to enrolling in the course.

**Co-requisite:** A course that, if not previously completed, must be taken during the same semester as the course.

In completing the course selection form, students must select ten courses plus two optional courses to be used as a substitute if necessary. Remember the yearlong Grade 11 English course is separated as 2 separate courses but still counts as two credits. English 122/123 is a one semester course worth 1 credit. These credits are awarded when the course is completed successfully at the end of the school year. **Students entering grade 11 are encouraged to develop a tentative two-year plan.**

### Course Fees and Applications:

Please note that some courses require additional supplies and/or payment of lab, or other fees. Some courses require applications so please take note of those in the Course Information section.

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### **Locally Developed Courses**

These courses have been developed by NHS departments and have been approved by the Department of Education to provide additional course selection opportunities for our students. Students may take more than two; however only two courses may be used to meet the graduation requirement. At NHS, the only current course in this category is Woodlot Management 120.

### **Transcripts:**

All grade 11 and 12 courses and final marks are permanently recorded on a student's transcript. The school transcript provides an ongoing record of high school courses taken and marks obtained. It is the official document required by post-secondary institutions to verify a student's academic record.

### **Distance Education**

Several courses are offered through Distance Education and may be available to meet specific circumstances. Distance Education courses are offered on-line via the Internet and require a high degree of self-discipline and commitment to self-directed learning. Students in Grade 11 and 12 may be permitted to take one E-learning course per semester. Final approval for these courses is made by the school. For further information go to [www.nbvhs.nbed.nb.ca](http://www.nbvhs.nbed.nb.ca) or see Guidance for an application form.

#### **The distance learner is the student who:**

- Learns independently
- Views learning positively
- Is self-disciplined
- Manages their time well
- Enjoys working alone
- Expresses themselves clearly, in writing
- Has good, basic computer skills
- Values the role of technology in learning
- Loves to problem-solve and thinks critically
- Has defined educational goals

## **TECHNOLOGY EDUCATION AND SKILLED TRADES**

Technology Education and Skilled Trades provides students with opportunities for problem solving, designing, creating, and addressing current trends and issues. Student's use and study technology to create practical solutions to problems - individually or in groups - to develop technological skills, knowledge, and work ethics.

Technology Education enables students to explore their ideas, gain practical experiences, and work through thinking processes in a safe and supportive environment. Technology Education allows learners to evaluate their strengths and interests in career choices. It also reflects rapid changes in the workplace and allows students to make informed decisions about their futures while providing a foundation of skills that enable high school students to be gainfully employed after graduation—either full-time or while continuing their education or training.

Students enrolled in some High School Technology Education and Skilled Trades courses may use a percentage of their hours towards Apprenticeship training. Skilled Trades and Technology includes the courses found in the subject areas of Technology Education. Grade 11 and 12 skilled trades course maybe used towards the Fine Arts/Life Role requirement for graduation. Please check with Mr. Gallop or review the grad requirements to clarify.

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### Sample of Technology Education and Skilled Trades Courses at NHS

Automotive Electrical Systems 120	Framing and Sheathing 110
Broad Based Technology 9	Internal Combustion Engine 110
Broad Based Technology 10	Metals Fabrication 110
Computer Science 110	Metals Processing 110
Computer Science 120	Mill & Cabinet Work 120
Culinary Technology 110	Power Train and Chassis 110
Culinary Technology 120	Residential Finish 120
Digital Production 120	Production Welding 120
Electrical Wiring 110	

### Special Programs

In addition to the range of compulsory and elective courses available to you, the following programs offer students the opportunity to enroll in courses that support their special interests and/or career goals.

#### Career and Transition Planning

A variety of elective courses are offered to support the career interests of students. In addition, specific interests may also be explored through on-the-job work placements in both Career Exploration 110 and Cooperative Education 120 courses. These courses provide opportunities to gain work experience and develop workplace skills as part of your high school program. Workplace opportunities exist in many different areas. **Additionally, placements in trades related areas may be used as hours credited towards apprenticeship.**

\*\*Two new career specific co-op programs are being offered now: Long-term Care Co-op and Introduction to Early Childhood 120 Co-op. See your guidance counselor for more information.

#### Essential Skills Achievement Pathway (ESAP) Program

The Essential Skills Achievement Pathway (ESAP) Program is an opportunity for students to earn a high school diploma that prepares them for a post-secondary education, apprenticeship, or the world of work. The program consists of personalized learning opportunities that allow students to explore their skills, talents, abilities, and interests while intentionally attaining the 9 federally identified Essential Skills (i.e., reading text, document use, writing, numeracy, oral communication, thinking skills, working with others, computer use and continuous learning.) Proficiency in these skills is demonstrated and evaluated through problem and project-based learning in the classroom, community, and workplace. The ESAP program prepares students for the current skills-based economy as well as future work, learning and life. Students must select this pathway in grade 10. More information will be provided to students entering Grade 10 in the academic year 2022-2023. If there are any questions, please see Guidance or Mr. Kitchen, Essential Skills teacher.

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### **Personal Interest Courses (1 and 2)**

Designed for grade 12 students, the one or two credit Personal Interest course will appeal to those interested in a self-directed exploration of a topic or subject of their own choosing. Students selecting this course are provided with the time and opportunity, to develop and pursue personal interests. Students will be required to design the program of study in conjunction with their teacher(s), and/or other mentors in the school or community. Students must follow safety guidelines and review and follow policies related to their projects. Students will need a high degree of independence and there is an application process for those interested. The outcomes for the Personal Interest course are based on the New Brunswick Global Competencies. **Application required—see Guidance.**

### **French Immersion Program**

#### **CERTIFICATE OF IMMERSION**

This certificate is issued by Anglophone School District West and is offered to all students who have completed the requirements of the **French Immersion Program** through grade 12; 50% of courses in each of grades 9 and 10; 25% of grades 11 & 12 over the two years (five courses gr 11/12). A complete listing of NHS' F.I. courses can be found in the Course Description Section.

#### **CERTIFICATE OF PROFICIENCY**

The certificate of Oral Proficiency is issued to **grade 12 students** either in the **Immersion or PIF program** and indicates a student's level of proficiency. This certificate is awarded by the Department of Education following an oral assessment by professional evaluators. The certificate is presented upon completion at the end of the semester. There is no cost for this assessment. Students must be enrolled in a grade 12 French course in grade 12 to be eligible for the proficiency test.

#### **NBTAP (New Brunswick Trades Apprenticeship Program)**

The New Brunswick Teen Apprentice Program (NBTAP) is an industry-led pre-apprentice program for students starting in Grade 10 or 11 that gives students a head start on an exciting career in the skilled trades. Over two or three paid summer work terms, NBTAP Student Apprentices are coached and mentored by a skilled trades employer, learning practical trade and workplace skills. **See Guidance for details or visit [www.nbtap.ca](http://www.nbtap.ca)**

#### **Course Changes**

Students, with the help of parents, are encouraged to carefully consider their choices when selecting courses. Consideration should be given to the entry requirements of various post-secondary institutions as well as career interests. To aid in this selection, teachers and guidance are prepared to help you to choose appropriate courses. Once all students have been scheduled, course changes are difficult to accommodate.

Requests for a course change due to a failure in June will be accommodated, if space allows, and if requested at that time. Requests for a course change due to Summer School results will be accommodated, if space allows, and if requested at the time summer school ends.

Requests for a course change initiated once school opens in September must be submitted using a Course Change Request form by the Wednesday following the first day of classes. These requests

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will be considered if supported by academic need, graduation requirements, post-secondary admission requirements and/or career direction providing there is available space in the course(s) requested. All requests for a second semester course change must be submitted by the Friday following the first day of classes in the second semester.

After the above dates, all requests for course changes must be submitted to Guidance for forwarding to NHS Student Services team for special consideration. These requests will be considered up until the last Friday of September for the first semester and the last Friday of February for the second semester.

### GENERAL NOTES

It is necessary for students to accept a large part of the responsibility for choosing their own courses with wisdom and foresight. These choices must be made early in the year if the work in connection with individual scheduling is to be completed in time for September school opening.

Entrance requirements for universities and community colleges must play an important role in course selection. It is important to note that **POST SECONDARY ENTRANCE REQUIREMENTS MAY BE VERY DIFFERENT FROM HIGH SCHOOL GRADUATION REQUIREMENTS**. Students should consult with Guidance regarding entrance requirements for specific courses at post-secondary institutions.

The school will endeavor to provide counseling services to assist students in selecting courses. The following factors will be considered:

- (a) long-term education and skilled trades' goals
- (b) achievement in previous school experiences
- (c) demonstrated attitudes toward school subjects
- (d) mental and manual aptitudes

**Parents and students are requested to give course choices serious consideration, as it is difficult to make course changes during the school year. Parents and students are invited to consult with the school on any matter regarding course selection at any time.**



# myBlueprint

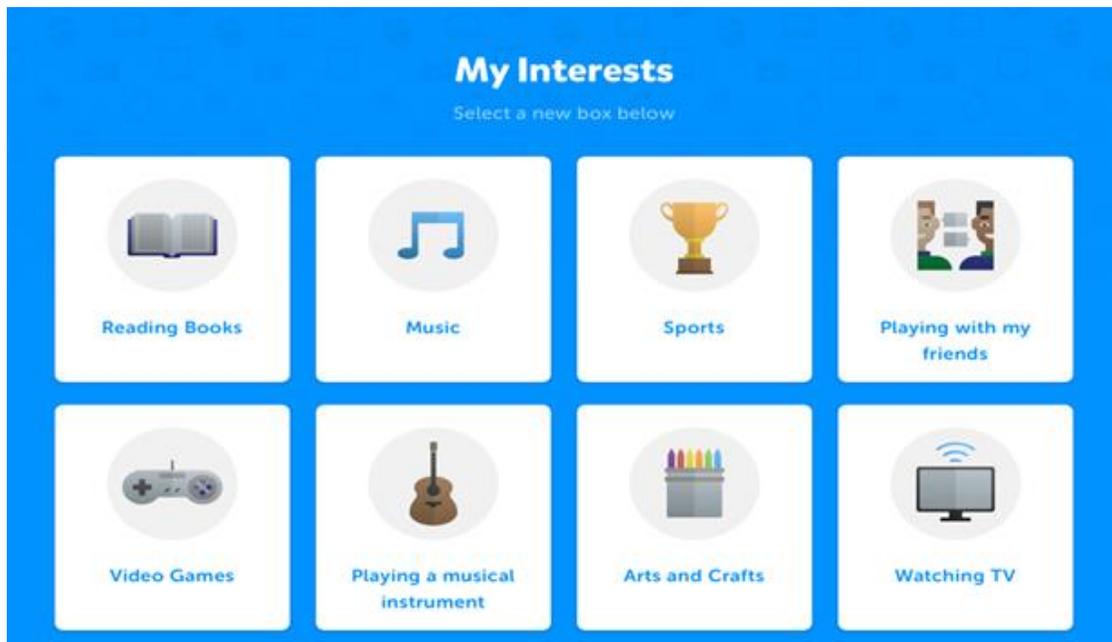
Not sure what career path you would like to follow? myBlueprint is an academic planner that offers assessments, search tools, and videos to help you explore possible career paths. Best of all, it is Canadian information. Most students would have used this program in grade 10 PDCP class, but if you don't have an account, follow these steps to set one up. You might want to book an appointment with your guidance counsellor about exploring your results and the questions that follow.

How to Create a New Account:

1. Visit [myBlueprint.ca/anglophone west](https://myBlueprint.ca/anglophone-west)

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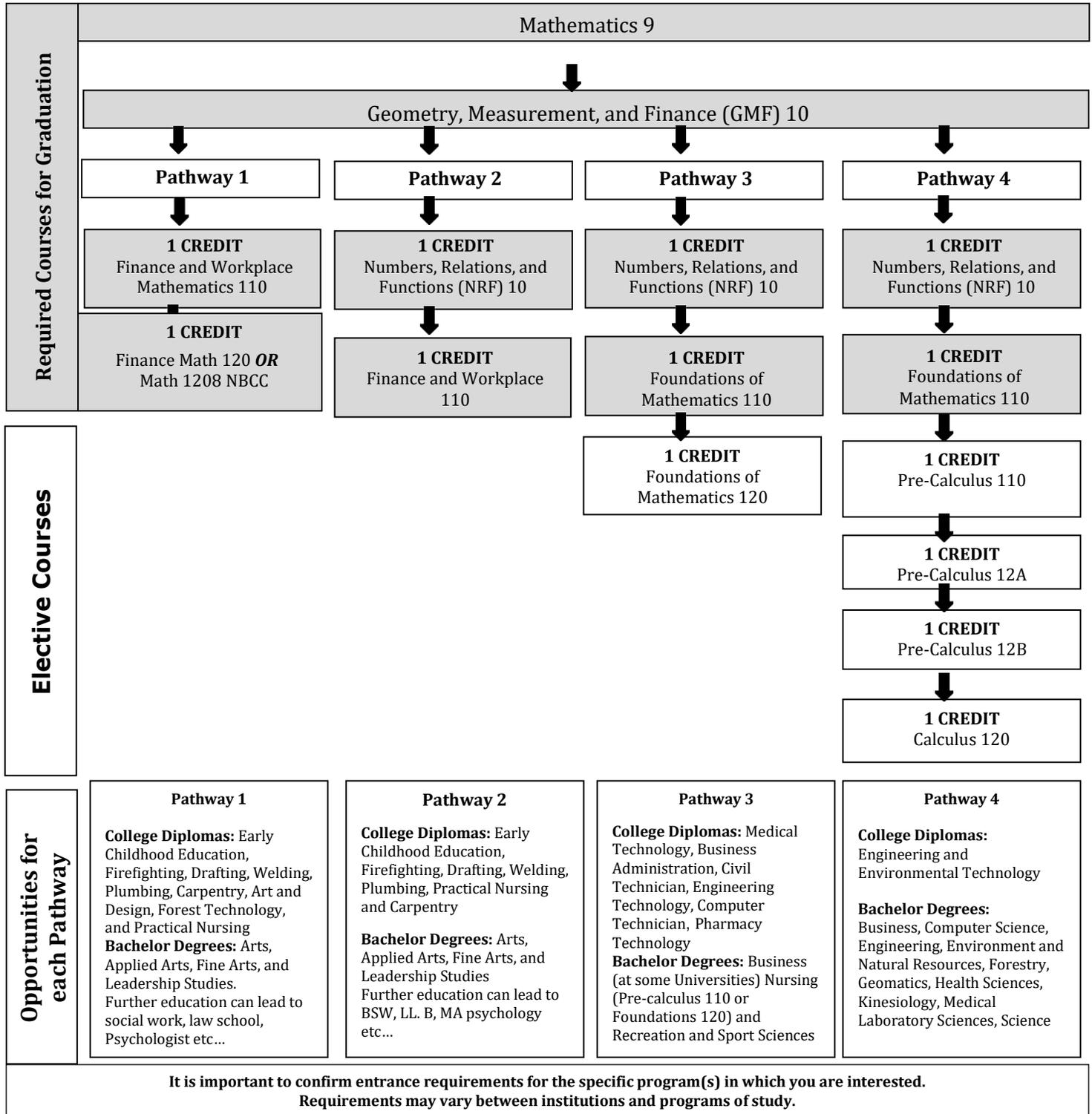
2. Click 'Sign Up'
3. Select Your School: Nackawic High School
4. Select 'Create Account'
5. Select 'Student'
6. What Grade Are You In: Select
7. Enter Education Number (the long number next to your name on your schedule)
8. Enter Birthdate
9. Select an email you use and remember. Select Password you will remember.
10. For assessments, click the 'Who Am I' tab on left side of the screen. There are several.



## Nackawic High School Graduation Pathways for Mathematics

Each pathway is designed to provide students with the mathematical competencies and critical thinking skills they will need after high school. Students should select courses in the pathway that best fits their interests and plans for after high school. Each pathway provides students with a different focus on math concepts and skills. Students may choose to take additional mathematics courses beyond the graduation requirements to better prepare them for what they want to do following high school.

**Important Notes:** Graduation requirements have recently changed for math. Students entering grade 11 or 12 in September need to complete 2 math credits. Please refer to the diagram below for the various options.



Nackawic High School  
Students Entering Grade 11

**New Brunswick High School Graduation Requirements**

**To graduate, you must meet all the following requirements:**

- Complete the entire Grade 9-10 program
- Pass 18 out of 21 credits in Grades 10-12, seven of which are compulsory courses listed below
- **Five** of these credits must be from Grade 12 courses including English
- Pass the English Language Proficiency Assessment
- Have no more than **two** local option courses out of the 18 required courses
- Students are expected to attempt 21 credits

**Compulsory (must select and pass) courses**

- English 11 Literary Text and English 11 Informational Text (**2 courses, 2 credits**)
- Math – must pass **two** of (Numbers Relations and Functions 10 and **either** Fin and Workplace 110 **OR** Foundations 110) **OR** (Financial & Workplace Mathematics 110 **AND** Finance and Workplace Math 120 **OR** Math 1208 NBCC) (**2 credits**)
- Science (**1 credit**) (see list of options below)
- History 11 (**1 credit**)
- Fine Arts & Life Role Development (**1 credit**) (see list of options below)
- English 12 (**1 credit**)

**\*Notes- French Immersion students must successfully complete five of their 21 credits** (over the two years) in French to obtain their FI certificate in grade 12. To be eligible for the oral proficiency interview in grade 12, a grade 12 French course must be taken in grade 12.

**Science Options**

Physics, Biology, Chemistry, Human Physiology 110, Introduction to Environmental Science 120, Physical Geography 110, Automotive Electrical Systems 120.

**Fine Arts/Life Role Development**

\*Automotive Electrical Systems 120, Career Exploration 110, Cooperative Education 120, Culinary Technology 110/120, Dramatic arts 110/120, Early Childhood Coop 120, Entrepreneurship 110, Framing and Sheathing 110, Goals, Growth and Grit 120, Housing and Interior Design 120, Individual Family Dynamics 120, Internal Combustion Engines 110, Long-term Care Coop 120, Metals Fabrication 110, Metals Processing 120, Mill and Cabinet Work 120, Music 112, Music 122, Nutrition for Healthy Living 120, Outdoor Education (Pursuits) 110, Physical Education Leadership 120, Power Chain and Chassis 110, Residential Finish 120, Visual Arts 110/120 and Wellness through Physical Education 110, Electrical Wiring 110, Advanced Wiring 120.

**\*Automotive Electrical Systems 120** – if used as a science credit, students must select a different Fine Arts/Life Role credit.

\*Duke of Edinburgh's Award Young Canadians Challenge Silver or Gold level may be used as Challenge for Credit for Outdoor Pursuits 110. **See Guidance Counsellor.**

\*Army, Air, Sea Cadet courses may be combined and used as Challenge for Credit for Outdoor Pursuits 110. **See Guidance Counsellor.**

Nackawic High School  
**Students Entering Grade 12**  
**New Brunswick High School Graduation Requirements**

**To graduate, you must meet all the following requirements:**

- Complete the entire Grade 9-10 program
- Pass 18 out of 21 credits in Grades 11-12, seven of which are compulsory courses listed below
- **Five** of these credits must be from Grade 12 courses including English
- Pass the English Language Proficiency Assessment
- Have no more than **two** local option courses out of the 18 required courses
- Students are expected to attempt 21 credits

**Compulsory (must select and pass) courses**

- English 11 Literary Text and English 11 Informational Text (2 courses, 2 credits)
- Math – must pass two of (Numbers Relations and Functions 10 and either Fin and Workplace 110 OR Foundations 110) OR (Financial & Workplace Mathematics 110 AND Finance and Workplace Math 120 OR Math 1208 NBCC) (2 credits)
- Science **(1 credit)** (see list of options below)
- History 11 **(1 credit)**
- Fine Arts & Life Role Development **(1 credit)** (see list of options below)
- English 12 **(1 credit)**

**\*Notes- French Immersion students must successfully complete five of their 20 credits** (over the two years) in French to obtain their FI certificate in grade 12. To be eligible for the oral proficiency interview in grade 12, a grade 12 French course must be taken in grade 12.

**Science Options**

Physics, Biology, Chemistry, Human Physiology 110, Introduction to Environmental Science 120, Physical Geography 110, Automotive Electrical Systems 120.

**Fine Arts/Life Role Development**

\*Automotive Electrical Systems 120, Career Exploration 110, Cooperative Education 120, Culinary Technology 110/120, Dramatic arts 110/120, Early Childhood Coop 120, Entrepreneurship 110, Framing and Sheathing 110, Goals, Growth and Grit 120, Housing and Interior Design 120, Individual Family Dynamics 120, Internal Combustion Engines 110, Long-term Care Coop 120, Metals Fabrication 110, Metals Processing 120, Mill and Cabinet Work 120, Music 112, Music 122, Nutrition for Healthy Living 120, Outdoor Education (Pursuits) 110, Physical Education Leadership 120, Power Chain and Chassis 110, Residential Finish 120, Visual Arts 110/120 and Wellness through Physical Education 110, Electrical Wiring 110, Advanced Wiring 120.

**\*Automotive Electrical Systems 120** – if used as a Science credit, students must select a different Fine Arts/Life Role credit.

\*Duke of Edinburgh's Award Young Canadians Challenge Silver or Gold level may be used as Challenge for Credit for Outdoor Pursuits 110. **See Guidance Counsellor.**

\*Army, Air, Sea Cadet courses may be combined and used as Challenge for Credit for Outdoor Pursuits 110. **See Guidance Counsellor.**

## Course Descriptions 2022-2023

### A

#### **ADVANCED WIRING 120**

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. **Pre-requisite Electrical Wiring 110 (recommended)**

#### **AUTOMOTIVE ELECTRICAL SYSTEMS 120**

This one-credit course is designed to introduce students to the theory of operation and basic service of the automotive electrical system. It will also cover electrical symbols, batteries, lighting, cranking, and charging systems. This course may be used as a science credit. **Prerequisite: Int. Combustion Engines 110 *Personal Safety Equipment Required***

### B

#### **BIOLOGY 112**

Biology 112 is a one semester introductory course which is intended to better acquaint students with, and awaken their interest in, living things. Some topics for study include cell structure and function, biodiversity and classification, digestion, circulation and blood, respiration, excretory system, and immunity. Class work will include individual assignments, participating in class presentations, laboratory work including dissections and various other activities. Students will be required to do a great deal of study, both in class and at home. This course provides a substantial basis for further study in Biology. **Prerequisite: Geometry, Measurement and Finance 10, Science 10. (English or French Immersion)**

#### **BIOLOGY 122**

Biology 122 is a one-semester course that is designed for students who plan to attend university. This course includes the following topics: endocrine, Mendelian genetics, evolution, the nervous system, reproduction and development, chromosomes, genes, and DNA, and change in populations, communities and species. Class work will include individual assignments, participating in class presentations, dissections and other laboratory work and various other activities. Students will be required to do a great deal of study, both in class and at home. **Prerequisite or Co-requisite: Foundations of Mathematics 110,**

#### **BUSINESS ORGANIZATION & MANAGEMENT 120**

This course will allow students to survey all aspects of business and stimulate interest to pursue studies at a post-secondary level as they become aware of career opportunities and the challenges of the entrepreneur in a global setting. This is an introductory course that pertains to business organization, ownership, operation, and management. It will focus on the Canadian Business System and deal with large and small businesses as they function successfully within the system. The course will be organized in a co-operative learning style with seminars, case studies and opportunity for research and sharing of information on such topics as: management of personnel, sources of funding, labour relations and stock market.

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# C

### CALCULUS 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. 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. **Prerequisite: Pre-Calculus A 120 and Pre-Calculus B 120**

### CAREER EXPLORATION 110 (2 Credits)

Career Exploration 110 is an exploratory and experiential course that integrates classroom curriculum with work experience in the community. The course is designed to encourage students to examine personal interests, values, and aptitudes prior to engaging in a workplace readiness component. The emphasis of the course focuses on exploration and students are provided with the opportunity to work in a variety of work settings upon completion of the pre-employment module.

### CHEMISTRY 112

This course is the first of two sequential Chemistry courses and introduces students to matter, elements, compounds, reactions, gases, analysis and bonding. Labs are used to reinforce concepts discussed in the classes as well as to give students a sense of accomplishment. UNB requires Science, Kinesiology, Engineering, Forestry, Computer Science, and Nursing students to have credits in Chemistry 112 AND 122. NB Community College also requires credits in Chemistry for some technology courses. This course should be taken in conjunction with Foundations Math 110. **Prerequisite: Geometry, Measurement and Finance 10 AND Number, Relations and Functions 10, Science 10 AND Prerequisite or Co-requisite: Foundations of Mathematics 110.**

### CHEMISTRY 122

Chemistry 122 is the second course of two sequential chemistry courses in which emphasis is placed on teaching chemistry using the scientific method. The topics include thermochemistry, solutions, kinetics, equilibrium, acids and bases and organic chemistry. Labs are used to reinforce most of the important concepts learned in class. **Prerequisite: Chemistry 112, Foundations of Mathematics 110**

### CHILD STUDIES 120

This course is “a study of the most significant resource that we possess-children”. Child Studies 120 explores how children develop physically, socially, emotionally, and intellectually. Students will be required to do observations of children between the age of six months and five years. Thus, ongoing observations and experiences with children is an essential part of this program. Marks are based on observations, projects and a final exam.

### COMPUTER SCIENCE 110

Computer Science is fast becoming valued to persons wishing to understand computer careers, software development, and information management. This course focuses on science and technology related knowledge to solve real computer science problems, creating authentic learning situations. Students assess

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existing programs/games, create games, research, redesign and develop value added programs within the gaming framework.

### COMPUTER SCIENCE 120

This course is recommended for students with a strong interest in computer programming. Students will learn the basic syntax of the Java language, program Java Applets and write simple programs using object-oriented design principles. The course provides a good foundation for students who wish to pursue a post-secondary program in computer science. **Computer Science 110 is recommended, but not required**, as a prerequisite for Computer Science 120.

### COOPERATIVE EDUCATION 120

Cooperative Education 120 provides students with an opportunity to explore a career that is of interest to them. They are placed in an on-the-job training experience that enables them to apply skills already learned in school or to learn new skills. **Interested students must complete an application form available from the Cooperative Education teacher or Guidance Department.** Acceptance into the course depends upon the suitability of the student for training placement and the availability of placements.

### COMPUTER AIDED DESIGN 110

This is an introductory course designed to give students a solid base of knowledge and skill in the drafting area. Through various activities, including sketching, and computer assisted drawing (CAD), students gain the skills necessary to both visualize and present ideas graphically. As use of this form of graphic communication is so universal, this course would be of interest and benefit to a wide range of students beyond those pursuing a career specifically in the drafting industry or technology/engineering areas.

### CULINARY TECHNOLOGY 110

Culinary Technology 110 is an entry level hands-on food service training course designed for students who may be considering a career in the food service industry. Culinary skill sets include industry organization, standards, safety and sanitation, use of tools and equipment, and food preparations. Students will study the theory of each skill and then practice those skills under supervised lab activities. The labs include learning to make cookies, quick breads, pies/pastries, icings/fillings, and baking with yeast.

### CULINARY TECHNOLOGY 120

Culinary Technology 120 is a continuation of Culinary Technology 110. The grade 12 skill sets include a review of skills learned in grade 11, plus: development of skills and knowledge needed in the food service industry, understand sanitation and safety challenges in food service, and to gain knowledge in standard procedures used in food preparation and service. Students are encouraged to learn through enterprise activities. Labs include influences on North American cuisine, food for meals (legumes, fruits and vegetables, shellfish, meat cuts), menu management, plating and additional food preparation skills. Additional theory includes the planning of quality meals, ordering, pricing, preparation and service. **Pre-Requisite: Culinary Technology 110**

## D

### DIGITAL PRODUCTION 120

Digital Technologies 120 is a skills-based course designed to introduce you to cutting edge technology and techniques used in the multimedia industry. Students will study Web development, digital animation and digital audio. The skills that are developed allow students to build complex Web and multimedia productions. Students in this class will look after the school Web Site, the morning announcements, the monitor in the lobby as well as the development of the Yearbook for Nackawic High School.

# E

## **ELECTRICAL WIRING 110**

This course is for all students who want to learn about circuitry. No experience is necessary. Students enrolled in this course will learn 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 journeyman in the construction trades.

### **Course Description – English Language Arts**

English Language Arts encompass the experience, study, and appreciation of language, literature, media, and communication. It involves language processes: speaking, listening, reading, viewing, and writing and other ways of representing.

The English Language Arts curriculum engages students in a range of experiences and interactions with a variety of texts designed to help them develop increasing control over the language processes, use and respond to language effectively and purposefully, and understand why language and literacy are so central to their lives. Student achievement involves established criteria based upon provincial reading and writing standards.

## **ENGLISH LANG ARTS INFO TEXT 112**

### **ENGLISH LANG ARTS LIT TEXT 112 (2 Credits)**

Each semester course is designed with a focus on building an awareness of strategies and processes to construct meaning and enjoyment from texts. Students will study the author's craft, providing a model they can imitate in their own writing; apply critical, analytical, and creative thinking skills; identify and solve problems; and engage in thinking about and discussing problems and issues that concern them. Level Two courses are designed to prepare students for post-secondary expectations. *Students must select both English Literary Text and Informational Text. Prerequisite: English 10 (Lit Text and Infor Text)*

## **ENGLISH LANG ARTS INFO TEXT 113**

### **ENGLISH LANG ARTS LIT TEXT 113 (2 Credits)**

Each semester course is designed with a focus on building a balanced literacy framework that meets learners where they are as readers, writers, and speakers through guided, independent, and applied practices in reading and writing. Learners spend most of their time working, not watching; skills are demonstrated to learners when they need them; learners are coached and receive ongoing feedback and support. Level Three courses are designed to prepare students for college entry or the world of work. *Students must select both English Literary Text and Informational Text. Prerequisite: English 10 (Lit Text and Info Text)*

## **ENGLISH LANGUAGE ARTS 122 (1 semester, 1 credit)**

Developed for students wishing to pursue the study of English Language Arts, which is based upon provincial appropriate achievement standards. Students will engage in a wide variety of experiences in speaking and listening, reading and viewing, writing and other ways of representing while concentrating on critical and personal response to Canadian and world literature. Students will demonstrate a commitment to meeting established goals for each of the following: speaking and listening, reading and viewing, and writing and representing. **Prerequisite: English 112 (Lit Text and Info Text)**

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### **ENGLISH LANGUAGE ARTS 123 (1 semester, 1 credit)**

Developed for students wishing to pursue the study of English Language Arts, which is based upon provincial appropriate achievement standards. This English course provides a variety of experiences with language and texts to develop competencies in speaking, listening, reading, viewing, writing and other ways of representing. English level 3 courses may differ in terms of pace, scope emphasis and resources from level 2, but all students in all levels work toward meeting the same provincial English Language Arts outcomes. Goals will be established for each of the following: speaking, listening, reading, viewing, writing, and other ways of representing. **Prerequisite: English 11 (Lit Text and Info Text)**

### **ESSENTIAL SKILLS**

A personalized, skills-based opportunity for students to receive a New Brunswick high school diploma that will lead them directly to a post-secondary (college, technical and/or trade school) education, an apprenticeship, or straight to work. This personalized learning pathway is based on the 9 federally regulated and 2 provincially regulated essential skills. The experiential, problem and project-based learning environment positions the student at the center, and the teacher as a mentor and guide on the side. **Entry point is second semester of grade 10 and requires follows an application and interview process with the teacher, student, and parent/guardian.**

### **ENTREPRENEURSHIP 110**

Entrepreneurship is about developing a business. This course will focus on students creating ideas, skills and recognizing business opportunities. Students will learn about creating a small business via group work, research, videos, guests, and hands on experiences that will help build a possible future career. This course is dedicated to student-lead investigation where critical thinking, problem solving, and decision-making skills will be developed in the process of examining and analyzing a business venture. This is an excellent course for students who wish to continue the study of business. Students will also be required to complete mandatory oral presentations as part of this curriculum.

## **F**

### **FINANCIAL AND WORKPLACE MATHEMATICS 110**

This course is the first 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. 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, 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. **Prerequisite: Geometry, Measurement and Finance 10**

### **FINANCIAL AND WORKPLACE MATHEMATICS 120**

This is the second in 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 probability. Linear relations are studied, including patterns and trends, graphing, creating tables of values, writing equations,

## Nackawic High School

interpolating and extrapolating, and solving problems. Students gain an understanding of mean, weighted and trimmed mean, median and mode, and explore probability. Opportunity is given to research and present an historical event or an area of interest that involves mathematics. **Prerequisite: Financial and Workplace Mathematics 110 or Foundations of Mathematics 110**

### **FINE ARTS 110**

Fine Art 110 is an introduction to the Arts in general: a combination of Drama, Music and Visual Art. Every culture utilizes drama, music and visual art whether for entertainment, spiritual expression, or both. During this course students will discover how the Fine Arts are representative of different cultures and or different time periods. Students will also learn how all the Fine Arts are combined to produce spectacular productions. The emphasis is not on performance or production but rather on understanding how to perceive expressiveness through various art forms. Students will be expected to do some performing in front of their peers.

### **FOUNDATIONS OF MATHEMATICS 110**

This course is a prerequisite 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 pre-requisite for the Pre-Calculus pathway. 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 inequalities in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored and investment portfolios are analyzed. **Prerequisite: Geometry, Measurement and Finance 10 AND Number, Relations and Functions 10**

### **FOUNDATIONS OF MATHEMATICS 120**

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. **Pre-requisite: Foundations of Mathematics 110**

### **NBCC SKILLED TRADES AND WORK-READY MATH 120**

#### **(Dual Credit with NBCC (MATH 1208))**

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. The intent of this course is that students become proficient with concepts in-context, so they can easily apply skills in workplace situations. Students should become familiar and proficient with the terms 'accuracy' and 'precision,' and be able to determine what measuring tool is appropriate in various situations and will provide the required level of accuracy/precision. Lessons could also feature the opportunity to work with measurement tools such as a tape measure, metal ruler, micrometer, calipers, protractors, etc., in context. Imperial and S.I. units may be explored with a focus given to those most commonly found in the context of a post-secondary program or jobsite (ex: fractional inch). **Prerequisite: Financial Workplace Math 110**

Nackawic High School  
**FRAMING AND SHEATHING 110**

In this course students will be introduced to the process used in house construction. A combination of classroom learning and hands-on experience in the carpentry laboratory will familiarize students with the tools, materials and techniques used in home construction and renovations.

**FI INDIVIDUAL & FAMILY DYNAMICS 120**

This course is for students who have completed FI Language Arts 10. The overall aim of FI Family Dynamics 120 is to provide students with the necessary knowledge, skills, and abilities to meet the challenges of our dynamic and complex society. The course focuses on the development of resourcefulness to assist students in viewing the family from various perspectives and to make informed decisions about solutions to existing and emerging difficulties occurring in everyday living. The interrelatedness between family life and work life is addressed as well as the need to understand better daily family issues and their impact on both the family and work environments.

**FI MODERN HISTORY 112**

This course is for students who have successfully completed FI Social Studies 10. The purpose is to continue the student's progress through the sequential Late French Immersion option at the high school level. FI History 112 presents a study of the French Revolution, World War I, World War II, and the Cold War. In addition, it assists students to understand and use several of the skills used in historical research and writing. **There will be a continued insistence on the use of French both as the language of instruction and communication in the classroom.**

**FI LANGUAGE ARTS 110**

This course is the second in the sequence of French Immersion Language Arts courses in the French Immersion option. Through this course students will continue to expand their facility in oral and written French with the following general objectives:

1. To ensure at the high school level, the maintenance and progression of the linguistic acquisitions of the pupil coming through the middle school French Immersion program and FI Language Arts 10.
2. To continue to emphasize communication to foster growth of the language skills: listening, speaking, reading and writing.
3. To encourage the use of the language as a vehicle allowing pupils to express themselves in a fitting manner suited to their intellectual, social and emotional growth.
4. To increase the pupil's cultural knowledge and experiences to promote an appreciation for the French-speaking population and culture of our country and of other parts of the world.

The course content will include oral expression, composition, and a further study of grammar, literature, and culture. The objectives of the course will be realized through exposure to various texts, novels and short stories, poetry, drama, newspapers, and magazines. **There will be a continued insistence on the use of French both as the language of instruction and communication in the classroom.** This is a **compulsory** course for those students who have elected to follow the French Immersion option at the high school level. Students continuing with the French Immersion option and who have successfully completed this course will select FI Language Arts 120.

**FI LANGUAGE ARTS 120**

This course is the final French Immersion Language Arts course in the French Immersion option. Through this course students will continue to expand their facility in oral and written French with the general objectives as stated in the course description for FI Language Arts 110. The content of the course is based on five components: oral expression, composition, grammar, literature and culture. To realize the stated objectives of the course, there will be continued exposure to various texts, French novels and short stories, poetry, drama,

## Nackawic High School

newspapers and magazines. **There will be a continued insistence on the use of French both as the language of instruction and communication in the classroom.** This is a **compulsory** course for those students who have elected to follow the French Immersion option at the high school level. The New Brunswick Oral Proficiency Interview is a required part of this course. **Prerequisite: FILA 110**

# G

## **GOALS, GROWTH AND GRIT 120 (SKILLS FOR SUCCESS)**

Research has identified key factors that impact student success. These challenges are not specific to any one subject area but affect all learning opportunities and life demands. Reading and communication skills as well as self-regulation strategies impact success in school and life. Goals, Growth, and Grit: Skills for Success 120 is an elective course for students who intend to continue formal education in a post-secondary institution and for whom explicit and direct instruction with these key skills and strategies will build capacity to realize potential. Goals, Growth, and Grit: Skills for Success 120 will provide students with skills in three main areas - positive and productive mindsets and behaviors, organizational patterns, as well as functional and critical literacy. Within the broad learning expectations of the course, specific success skills, strategies, and practices will be explored. Students will be supported to apply and transfer these skills, strategies, and practices to other courses and real-life situations. Students will learn how these support postgraduate pursuits.

# H

## **HUMAN PHYSIOLOGY 110**

The goal of this course is to build an understanding of the physiology of the human body as a complex dynamic organism that is self-contained but impacted by and responsive to the outside world. Students will build their scientific literacy skills as they focus on the biology and healthy functioning of all major human body systems and how wellness can be compromised by struggles with mental and social health, lifestyle choices, and disease. **Prerequisite: Geometry, Measurement and Finance 10, Science 10**

## **HOUSING AND DESIGN 120**

Housing and design is intended for students who wish to increase their awareness of the housing environment and the implications of technological advancement. Housing decisions represent the single largest expenditure of the family income for most households. The course demonstrates the value of creativity and individuality in designing a living environment. Students will learn:

- 1 To raise the student's awareness of architectural aesthetics.
- 2 To understand the motivating factors that have an impact on the economy and environment.
- 3 To utilize the elements and principles of design as they apply to interior décor.
- 4 To encourage individual creativity through interior design.
- 5 To incorporate technology options in the living environment.

# I

## **INDIVIDUAL AND FAMILY DYNAMICS 120**

In this course, students will study growth as an individual and as a family member. Lessons are often done in a seminar setting where there is sharing of ideas and research. Videos and speakers from community service organizations are accessed whenever possible. Marks are based on class work, projects, tests and a final exam.

Nackawic High School  
**INTERNAL COMBUSTION ENGINES 110**

This is a course designed to develop proficiency in the repair, overhaul, service and testing of the internal combustion engine and other automotive components. The theory of operation of the engine and its components is emphasized along with the development of manipulative skills and work habits. This course should be of interest to students who wish to enter or learn about the opportunities and requirements of the motor vehicle service industry and students with a general interest in mechanics.

**INTRO TO ENVIRONMENTAL SCIENCE 120**

The objective of this course is for students to develop the knowledge base skills for investigating and analyzing environmental issues and for communicating their knowledge and analysis to others. Students will be able to outline the ecological processes inherent in natural ecosystems and how these can be impacted by human activity. Identify the impact of personal behaviors on the environment, and recognize that caring for and sustaining natural environments is an element of responsible global citizenship, demonstrate an understanding of the importance of sustainable development, considering environmental, social, cultural, and economic aspects, to effectively resolve issues, analyze and propose solutions to current environmental issues through research, experimentation and a presentation of their findings with respect to the issue.

**INTRODUCTION TO APPLIED TECHNOLOGY 110**

Students will complete a series of projects from the areas of Woodworking, Motor Mechanics, Plumbing, Drywall Repair, Electrical, Manufacturing and Construction. All projects will be done in groups except for woodworking. There will be a series of tests, a mid-term and an exam. Evaluation will consist of 70% hands on and 30% tests and exams.

**J**

**JOURNALISM 120**

Journalism 120 is primarily a writing course focusing on print and broad-based journalism. Students will write, read, and analyze all forms of journalistic writing. Those choosing this course will be involved in peer-editing, interviewing and writing. Success is highly dependent on consistent class attendance, the ability to work in a team environment and good writing skills. Students will also be involved with the school website and the morning announcements

**L**

**LAW 120**

This elective course provides the student with a basic knowledge of the Canadian legal system, its operation, and an awareness of the impact of law on one's life. Major topics of the course include legal systems, civil and criminal law, human rights, property law and labour law.

**M**

**MEDIA STUDIES 120**

This course is a literacy and production-based course. Students will be expected to examine and deconstruct a variety of mediums for example: film, radio, television, music, newspapers and the Internet. Students need to be self-directed and dedicated in presentations on such issues as advertising and popular culture. This course requires students to critically think and write about the effects of media on today's society.

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### **METALS FABRICATION 110 (Welding)**

This course is concerned with the processes used in industry to safely cut, form and fasten metal. Emphasis is placed on the development of basic skills needed to use electric-arc and oxy-acetylene welding and cutting processes including the preparation of material for welding. Machines and processes used to lay out, cut and form sheet metal are also introduced. It should appeal to students interested in entering occupations in metalworking, mechanical service, and primary resource industries. A suitable take-home project will be constructed during this course.

### **METALS PROCESSING 120**

This course allows students to continue to explore the processes used in the manufacture of metal products. (*pre-requisite Metals Fabrication 11*)

### **MILL & CABINET WORK 120**

This course is designed to provide students the knowledge and skills required to build cabinets and various woodwork projects. Emphasis is placed on using and maintaining woodworking tools and machines. It should appeal to students interested in carpentry and various wood working projects. There is no prerequisite for this course and it is available for all Grade 11 and 12 students.

### **MODERN HISTORY 112**

Modern History 112 presents a study of the principal developments that have occurred on the world scene in modern times. It is an overview of the major changes in political, social, and economic lifestyles beginning with absolutism. Other topics presented include: the French Revolution, Napoleon, Industrial Revolution, Nationalism, rise of Germany and Italy, World War I, post- World War I era, World War II, and Russian

Revolution. In addition, it assists students to understand and use several of the skills used in historical research and writing such as recognition of a frame of reference, asking questions, forming a hypothesis, and evaluating a hypothesis. This course is accepted for university entrance. **Prerequisite: Social Studies 10. Grade 11 History is a graduation requirement.**

### **MODERN HISTORY 113**

Modern History 113 is designed to provide an understanding of the main events of the twentieth century, as well as some familiarity with a few of the basic skills used to interpret historical accounts. A survey approach is given to the following topics: Basic World Geography, French Revolution, Industrialization, Life in the 1920's and 1930's, World War I, World War II, Cold War and United Nations. **Prerequisite: Social Studies 10. Grade 11 History is a graduation requirement.**

### **MUSIC 112/113**

This course consists of practical performance, music theory, prescribed scores, listening and music history. Students may choose from Instrumental, Vocal or General

### **MUSIC 122**

This course is designed for the advanced and serious student of music who wishes to pursue the subject as an avocation or who may be interested in further studies at the post-secondary level. The course assumes an advanced level of musical literacy, good aural skills, a sound theoretical background, knowledge of historical styles and forms and an interest in improving upon and expanding their areas of musical knowledge and expertise.

## N

### **NUTRITION FOR HEALTHY LIVING 120**

Through research, the science of nutrition continues to expand. It is important to understand information provided and to make smart, healthy decisions. Nutrition for Healthy Living 120 is designed to make students aware of preventative strategies to contribute to overall wellness, make healthy food choices and maintain a balance between eating habits and physical activity. 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 lifestyles 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. **Prerequisite: Science 10**

## O

### **OUTDOOR EDUCATION 110**

The course will develop personal outdoor recreation skills based on environmental ethics. Students must satisfy the required series of out-trips that may be daytrips, overnight excursions or extended trips. The course may include but is not limited to camping, hiking, Kayaking, climbing, skiing and other outdoor adventure activities. **Pre-Requisite: HPE 10**

## P

### **PERSONAL INTEREST 110**

The purpose of this course is to recognize and provide credits to students who initiate and assist in the development of courses tailored to their needs, abilities and interests.

Projects may include:

- A topic or theme that extends the curriculum of a prescribed course (Example: Grade 12 Physics student may wish to do an in-depth study of quantum mechanics)
- A topic or theme chosen by the student including work that combines several subject areas. (Example: A study of Indigenous Issues in Canada, which may include research and study in Canadian History, Canadian Geography, Canadian Politics, Language Arts, Visual Arts and Music)

### **PHYSICAL EDUCATION LEADERSHIP 120**

This course is an elective course intended for students who wish to develop leadership skills. It is hoped that the leadership opportunities experienced in this course will develop an awareness of the need for dynamic, professional and affective volunteer leadership within the community. The course will deal with the theoretical and practical aspects of leadership, characteristics and qualities of leaders, coaching, fitness, officiating, first aid, teaching, professional presentations and evaluation. All students must complete 30 hours of community volunteer services (opportunities provided in class) to be successful in this course. **Pre-Requisite: HPE 10**

### **PHYSICAL GEOGRAPHY 110**

This course involves students in an examination of the current state of planet Earth. Students will determine how it got to be this way and look at the long-term future of the planet and its passengers. The course is particularly recommended to students interested in the environment, space, geology, and mapping. The course presents an introduction to geographical skills and methods that are basic to further study of this subject. Note: Physical Geography 110 may be counted as a science credit for graduation. **Pre-Requisite: Science 10**

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### PHYSICS 112

This course is the first of two sequential Physics courses. Successful completion of Physics 112, as well as giving a science credit for high school graduation, provides valuable background for those university-bound students interested in such fields as engineering, physics, oceanography, meteorology, astronautics, any of the physical sciences, or any program for which Physics is a prerequisite. UNB requires students entering Science, Engineering, and Forestry to have credits in Physics 112 and 122. NB Community College also requires credits in Physics 112 and 122 for entrance to some technology courses. The topics covered are measurement, motion, forces, wave motion, sound, light, work and energy. Students will have several laboratory sessions on these topics. **Prerequisite: Geometry, Measurement and Finance 10 AND Number, Relations and Functions 10, Science 10, Prerequisite or Co-requisite: Foundations of Mathematics 110**

### PHYSICS 122

This course is the second of two sequential Physics courses and is designed for students who have successfully completed Physics 112 or equivalent. Topics covered include vectors, circular motion, projectile motion, momentum, mechanics, universal gravitation and fields. Students will have several laboratory sessions on these topics. UNB requires students entering Science, Engineering, and Forestry to have credits in Physics 112 and 122. NB Community College also requires credits in Physics 112 and 122 for entrance to some technology courses. **Prerequisite: Physics 112 AND Foundations of Mathematics 110**

### POLITICAL SCIENCE 120

Political Science 120 is an introductory political science course designed to develop an understanding of various political ideologies and systems, as well as the ability to assess the merits of each and to make comparisons. Canadian municipal, provincial and federal governments will be examined, as will various international bodies, especially the United States. This course is particularly useful for students planning university study in the Humanities.

### POST INTENSIVE FRENCH 110

This course continues the sequence of Post Intensive French courses. This course extends the range of language skills, structures and concepts for effective communication in French in a variety of situations. It is designed for students who have successfully completed Post Intensive French 10. Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second language. Themes at this level include mysteries, injustices, and the power of photography. *\*Note also that if a student achieves a level of intermediate at the end of grade 10, he or she may select to enroll in French immersion courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.* **Prerequisite: Post Intensive French 10**

### POST INTENSIVE FRENCH 120

This is the final course in the program of Post Intensive Language courses. This course deepens and sharpens the language skills, structures and concepts for effective communication acquired in Post Intensive French 110. Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second language. Themes at this level include looking to the future, ecological challenges, similarities and differences and careers. *\*Note also that if a student achieves a level of intermediate at the end of grade 10, he or she may select to enroll in French immersion courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.* The New Brunswick Oral Proficiency Interview is a required part of this course. **Prerequisite: Post Intensive French 110**

Nackawic High School  
**POWER TRAIN & CHASSIS 110**

This course is designed to develop proficiency in the service and maintenance of the vehicle chassis and power train. Emphasis is placed on the function, repair and replacement of components and includes spring and shock assemblies, brakes, steering, wheel bearings, tires, transmissions, differentials, and drivelines.

**PRE-CALCULUS 110**

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 degrees to 360 degrees) 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, and quadratic inequalities in one variable. **Pre-requisite: Geometry, Measurement and Finance 10 AND Number, Relations and Functions 10 AND Foundations of Mathematics 110 (Pre or Co-requisite)**

**PRE-CALCULUS 120A**

This course follows Pre-Calculus 110 and precedes Pre-Calculus 120B. Students demonstrate and apply an understanding of the effects of horizontal and vertical translations, horizontal and vertical stretches, and reflections on graphs of functions and their related equations. They are introduced to inverses of functions, logarithms, and the product, quotient and power laws of logarithms and use these laws and the relationship between logarithmic and exponential functions to solve problems. Students are introduced to angles in standard position, expressed in degrees and radians, and to the unit circle. The six trigonometric ratios and the sine, cosine and tangent functions are used to solve problems. First and second-degree trigonometric equations are solved algebraically and graphically with the domain expressed in degrees and radians. Trigonometric identities are proven using reciprocal, quotient, Pythagorean, sum or difference, and double-angle identities. **Pre-Calculus 110 is a pre-requisite for this course, and this course is a pre OR co-requisite for Pre-Calculus 120B.**

**PRE-CALCULUS 120B**

This course follows **Pre-Calculus 120A** and precedes **Calculus 120**. Students analyze arithmetic and geometric sequences and series to solve problems. They are introduced to concepts of probability including permutations, combinations and binomial expansion. 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. **Pre-Calculus 120A is a pre OR co-requisite for this course.**

# R

**RESIDENTIAL FINISH AND INSULATION 120**

This course is designed to provide the instruction and practical experience necessary for the completion of the exterior and interior of houses. Included in this course are the use of tools and techniques required to install roofing, siding (vinyl and wood), exterior trim, doors, windows, insulation, drywall and interior trim. This course would appeal to students interested in carpentry. Good attendance is mandatory in this course.

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# S

### **SOCIOLOGY 120**

Have you ever wondered why humans behave the way they do? What shapes their attitudes, behaviors, beliefs, and values? Sociology is the study of society (there is a comma to remove here) and seeks to understand why humans behave the way they do when they are in groups. In this class you will learn to critically examine, and better understand your own beliefs about the social world. In this class we will be examine topics such as: culture, race, crime, gender, social structure, social reform, religion, family, media and deviance.

### **SCIENCE 122**

This course is highly recommended for students who are planning to further their education in engineering, chemistry or any of the other Physical sciences. This course is open to any student who has completed a significant number of courses in Physics 112 and Chemistry. Lab work is a significant part of this course.

# T

### **THEATRE/DRAMATIC ARTS 110 AND THEATRE/DRAMATIC ARTS 120**

Dramatic Arts 110 is a performance-based course designed to encourage students to develop their dramatic skills through exposure to a variety of challenges and opportunities that require creative and higher-order thinking skills. Theatre/Dramatic Arts 120 expands on the skills acquired in Dramatic Arts 110. In each course, students will be required to work individually, independently, in small groups, and in larger ensembles. Projects and research activities are encouraged to be activity-based experiential learning. Students will be exposed to a wide range of dramatic conventions and styles for the purpose of creating, analyzing, conducting research, and performing. In Theatre/Dramatic Arts 120, students will be expected to have more involvement and ownership of their learning and subsequent assessment. Students may be required to work outside of the classroom (including individual/ensemble practice and studio rehearsal) as the manifestations of theatre activities are many and varied. Students are also strongly encouraged to experience extracurricular and community-based opportunities. **STUDENTS WILL BE REQUIRED TO ATTEND AN OVERNIGHT DRAMA FESTIVAL TRIP PENDING APPROVAL FROM PROVINCE**

### **TOURISM 110**

The Hospitality/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, and access to resource people and information that will help the individual in his/her career choice. Topics include the eight main sectors of the tourism industry, influences on the tourism industry, personal and interpersonal skills regarding career opportunities available, travel industry and marketing strategies.

# V

### **VISUAL ARTS 110**

The visual experiences and technical processes in this course are organized in themes. These themes are designed to stimulate the imagination, encourage interpretation, expression and development of personal imagery. Each unit of study will include art theory, art of different cultures and time periods, studio applications and experimentation in one of the following: Drawing, Painting, Printmaking and Sculpture, sketchbook assignments and critiques. At this level the student is given opportunities to work independently and to explore,

## Nackawic High School

in greater depth, materials and concepts touched on in Visual Arts 10. There is a research presentation and an exit project requirement. Students are required to supply a sketchbook, art kit, and a portfolio. **Students should have experience and/or interest in the Arts. A background in Visual Arts 10 is recommended.**

### **VISUAL ARTS 120**

Visual Arts 120 is designed for the student who has shown an intense interest in Art and who may be considering further education or a career in Art or an Art related field. The Grade 12 program focuses on 20th century Art and artists, and portfolio building. There is a major research presentation at mid-term and a final exhibition at the end of term. Students are required to supply sketchbooks, art kit and portfolio. **Prerequisite: Visual Arts 110 (or equivalent experience).**

## W

### **WELLNESS THROUGH PHYSICAL EDUCATION 110**

The goal of the Wellness through Physical Education 110 curriculum is to promote healthy active living for life. Students will experience a variety of wellness activities 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. **Prerequisite: Successful completion of Grade 9 and 10 Physical Education and Health.**

### **WORLD ISSUES 120**

World Issues 120 examines various issues that are global in nature and that require a global solution. The concept of the global village is studied as is the relationship between nations as players in the global community. Various issues are examined to acknowledge the fact that events in any part of the world can have a profound effect on Canada. The future of Canada within the global community is also examined. **Prerequisite: Modern History 112 or 113**

### **WRITING 110**

Writing 110 is an elective course designed for students who may need extra practice developing competence in composing skills and also for those students who want to further their existing proficient writing skills to prepare them for higher level English courses and for university and community college. There is an emphasis in this course for students to further develop their creative writing skills. This course includes an exit project.

### **WOODLOT MANAGEMENT 120 (*Local Option Course*)**

Working in the school's woodlot students will learn the practices of managing a woodlot in an effective and environmentally sensitive manner.



Nackawic High School  
**GRADE 11 & 12 COURSE SELECTION PLANNING FORM 2022-23**

Name: \_\_\_\_\_ Grade for 2022-2023: \_\_\_\_\_

**Advisor:** \_\_\_\_\_ (don't forget advisor – this is how we track you)

**Planning:** Check off the Grade 10 courses above that you have successfully completed and select any you haven't completed yet first. Then complete the Grade 11 and/or Grade 12 chart below to ensure graduation requirements will be met.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> English 10 Info Text                       | <input type="checkbox"/> Broad Based Technology 10  | <input type="checkbox"/> English Language       |
| <input type="checkbox"/> English 10 Lit Text                        | <input type="checkbox"/> Intro to Applied Tech. 110 | <input type="checkbox"/> Proficiency Assessment |
| <input type="checkbox"/> Social Studies 10                          | <input type="checkbox"/> Phys. Ed. 10               |   |
| <input type="checkbox"/> Science 10                                 | <input type="checkbox"/> Art 10                     |   |
| <input type="checkbox"/> French 10                                  | <input type="checkbox"/> Music 10                   |   |
| <input type="checkbox"/> PDCP 10                                    |   |   |
| <input type="checkbox"/> Geometry, Measurement & Finance            | <b>( Any 2 of the above )</b>                       |   |
| <input type="checkbox"/> Numbers Relations & Functions 10 <b>OR</b> |   |   |
| <input type="checkbox"/> An alternate grade 11 elective _____       |   |   |

\*NRF is no longer a required course for grade 10. Please refer to page 8 of the course guide for more information on math

### Students Entering Grade 11 ~ 2022-2023

- |   |           |
|---|-----------|
| 1. English 11 Lit Text - 112 OR 113                                 | 7. _____  |
| 2. English 11 Info Text - 112 OR 113                                | 8. _____  |
| 3. Financial and Workplace 110 <b>OR</b><br>Foundations of Math 110 | 9. _____  |
| 4. Modern History 112 OR 113<br>FI Modern History 112               | 10. _____ |
| 5. Science _____  |           |
| 6. Fine Arts/ Life Role _____                                       |           |

Chose 2 alternate courses and list them in order of preference:  
 Alternate #1: \_\_\_\_\_  
 Alternate #2: \_\_\_\_\_

### Students entering Grade 12 ~ 2022-2023

- |                       |  |
|-----------------------|--|
| 1. English 122 OR 123 |  |
| 2. _____              |  |
| 3. _____              |  |
| 4. _____              |  |
| 5. _____              |  |
| 6. _____              |  |
| 7. _____              |  |
| 8. _____              |  |
| 9. _____              |  |
| 10. _____             |  |

Chose 2 alternate courses and list them in order of preference:  
 Alternate #1: \_\_\_\_\_  
 Alternate #2: \_\_\_\_\_

**\*\*You need 2 of the following Math courses to graduate (NRF 10, Foundations 110, Finance Math 110, NBCC Skilled Trades Math 120)**

## Nackawic High School

### Science Options

- Biology
- Chemistry
- Physics
- Human Physiology
- Introduction to Environmental Science
- Automotive Electrical Systems
- Physical Geography

**\*Automotive Electrical Systems 120** – if used as a Science credit, students must select a different Fine Arts/Life Role credit.

### Fine Arts and Life Role Options

- Automotive Electrical Systems 120
- Career Exploration 110
- Cooperative Education 120
- Creative Arts 110
- Culinary Technology 110/120
- Dramatic arts 110/120
- Early Childhood Coop 120
- Entrepreneurship 110
- Framing and Sheathing 110
- Goals, Growth and Grit 120
- Graphic art and Design 110
- Housing and Interior Design 120
- Individual Family Dynamics 120
- Internal Combustion Engines 110
- Long-term Care Coop 120
- Metals Fabrication 110
- Metals Processing 110
- Mill and Cabinet Work 120
- Music 112
- Music 122
- Nutrition for Healthy Living 120
- Outdoor Education (Pursuits) 110
- Physical Education Leadership 120
- Power Train and Chassis 110
- Residential Finish 120
- Visual Arts 110/120
- Wellness through Physical Education 110
- Electrical Wiring 110
- Advanced Wiring 120

**If you are interested in taking a Distance Course take a look at [www.nbvlc.nbed.nb.ca](http://www.nbvlc.nbed.nb.ca) and click on course information in the upper right-hand corner to see the types of courses offered. Choices differ slightly each year, but this will give you an idea of the choices. We recommend students do not attempt more than 1 distance course a semester as they are demanding and historically many students do not do well academically in distance courses.**